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2005 Career Planning GUIDE

How to make the right moves, at three stages of your IT career. Our guide begins on page 37.

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ONLINE IT job applicants and newbies provide some comic relief, in anecdotes from the Shark Tank archives. QuickLink 53540

PHOTOS: LEFT TO RIGHT: STELLA JOHNSON; JENNIE ZEINER; SCOTT INDERMAUER

CEO's Ouster Shines Spotlight on Siebel's Ills

CRM pioneer struggles to stop buffeting by rivals; some customers seek better treatment

BY MARC L. SONGINI

Last week's ouster of J. Michael Lawrie as CEO of Siebel Systems Inc. was viewed by users and analysts as more evidence that the CRM market leader is still struggling to respond to increased competition — and to live up to vows that it would help customers get more value from its software.

Siebel users likely face even more upheaval. The company's exact future course was left unclear in the wake of Lawrie's abrupt departure less than a year after he was hired, following a weak first-quarter financial showing. But new CEO George Shaheen said his priorities will include cost-cutting and a resizing of Siebel as part of an attempt to boost its financial results.

INSIDE

Bonnie Henn-Pritchard, assistant vice president of technology services at The Burlington Northern and Santa Fe Railway Co. in Fort Worth, Texas, said sudden senior management changes are always disconcerting to users. But, she added, "if a change in leadership will help Siebel to refocus on the fundamentals of product quality, customer service and delivery commitments, it will be a positive move for customers."

That notion was seconded by David Hahmann, vice president and general manager of EMI Industries Inc., which runs a midmarket version of Siebel's call center software. The application is working as

Siebel, page 49

Military Aims To Marshal Its Web Services

Registry rollout will link apps across units

BY HEATHER HAVENSTEIN

Two years after individual U.S. Department of Defense agencies began developing Web services to integrate applications, the DOD is ramping up efforts to make hundreds of Web services available to end users throughout the military's operations.

The DOD has begun installing Web services registry technology from Burlington, Mass.-based Systinet Corp. at its enterprise computing center in Columbus, Ohio. Slated to go into production this summer, the registry is intended to allow developers across the department to locate specific Web services.

The Defense Information Systems Agency will begin cataloging Web services developed by the U.S. Air Force,

DOD, page 14

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Go online for additional coverage of Web services technology.
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E-voting May Face Recall in Florida County

IT snafus lead to look at optical scanning

BY MARC L. SONGINI

Ongoing technical glitches are prompting election officials in Florida's Miami-Dade County to consider scrapping a $25 million investment in electronic voting systems.

Infamous for the hanging-chad controversy in the disputed 2000 presidential election, Miami-Dade now uses touch-screen technology from Omaha-based Election Systems & Software Inc. that were installed in 2002 to replace its punch-card machines. But coding errors by county personnel caused the iVotronic systems to under-

E-voting, page 16

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CONTENTS

04.18.05

Hammering Out Web Services Links
In the Technology section: Verizon has just completed an SOA project, dubbed the IT Workbeoch. The new technology enables the company to save on development costs by reusing applications distributed as Web services, says Verizon's Shadman Zafar. **Page 29**

What IT Women Want
In the Management section: A virtual roundtable of bigh achievers tells *Computerworld* that in today's business-oriented climate, women can fill in the geek gaps that separate IT from its customers. Here's what IT managers need to do to get women and keep them. **Page 33**

NEWS

6 **A retailer's IT security** breacb prompts HSBC Holdings to warn 180,000 credit card bolders of possible identity theft.

7 **Naw RFID tags** are expected to lead to lower costs, but that could take years.

7 **Sun preps utility** IT tools but will keep them oo its own hardware — at least initially.

10 **SAS users are skeptical** of the veodor's year-old effort to expand BI to business users.

10 **ABN Amro applies** IT portfolio management oo a global scale.

11 **Storage Networking World: The demand** for more storage capacity is outpacing the available technology, say confereoce atteodees; plus product oews and a Q&A with HP's Ann Livermore.

14 **Global Dispatches:** China and India strive toward creating an "Asian century" for IT.

16 **IT firms In India** are creating a ceotral repository for background data on tech workers.

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OPINIONS

8 **On the Mark: Mark Hall** reports that some makers of the boards that power security appliances think the PowerPC could help integrate all the network security tasks that IT managers have to support.

24 **Don Tannant** says oo ooe has done more to improve lives all over the world than U.S. technology pros — a fact that seems at odds with the anti-offshore fervor.

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50 **Frankly Speaking: Frank Hayes** says CRM as we know it is dead. Little wonder, then, that Siebel is in big trouble.

DEPARTMENTS/RESOURCES

At Deadline Briefs 6
News Briefs 8, 10
Letters 25
IT Careers 48
Company Index 48
How to Contact CW 48
Shark Tank 50

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KNOWLEDGE CENTER CAREERS

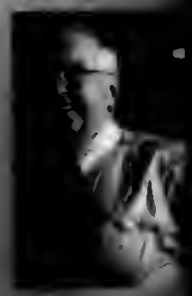
EDITOR'S NOTE: This handbook is full of advice to help you take charge of your IT career, whether you're just getting started, stalled out at midcareer or nearing retirement. **PACKAGE BEGINS ON PAGE 37.**

36 Getting Started. To break into the IT field, career changers and recent college graduates such as Bentley College alumnus Steve Kearns (left) need to find and promote what makes them special.

40 Midcareer Fishers. To expand their advancement opportunities and jump-start their careers, [illegible] workers [illegible]

York University's chief information technology officer, is learning all he can about business.

42 Nearing Retirement. IT professionals heading toward retirement, like John Wade (right), CIO at Saint Luke's Health System, are working harder than ever. Their goals are to stay current and grow their skills, while planning for the next phase of their careers.



44 Opinion: Career expert Johanna Rothman offers a step-by-step plan for taking charge of your career at every stage of your professional life. Plus, we look at some common career missteps and offer advice on how to [illegible]

CONTENTS

04.18.05

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DEPARTMENTS/RESOURCES

At Deadline Briefs	6
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Company Index	48
How to Contact CW	48
Shark Tank	50

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IBM Results Fall Below Expectations

IBM knocked Wall Street for a loop by announcing first-quarter earnings significantly short of analysts' expectations. Executives cited difficulties closing deals at the end of the quarter.

IBM BY THE NUMBERS		
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SUN BY THE NUMBERS		
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Breach of Credit Data May Have Broad Scope

HSBC warns 180k of possible ID thefts; other banks also aware of security gaffe

BY JAIKUMAR VIJAYAN

AN IT SECURITY problem involving a U.S. retailer's point-of-sale system (POS) is prompting HSBC Holdings PLC to warn 180,000 of its credit card holders about potential identity theft. And the breach could cause other companies that issue credit cards to take similar actions.

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Polo Ralph Lauren said that after learning about the retained information, it "took immediate steps to purge this data and cure the problem." The retailer said it's confident that its credit card system is secure and that customer data is properly protected. It declined to comment further.

Reviewing Strategies

Incidents such as this one are forcing many security managers to review their strategies for protecting data, said Howard Schmidt, chief information security officer at eBay Inc. and a former White House cybersecurity adviser.

"I know a number of CSOs who are getting calls from their executive ranks wanting to know if the same things could happen to them," Schmidt said.

What's needed is a multifaceted plan that addresses various threats, said David Wallace, director of global systems security at Pilgrim's Pride Corp. in Pittsburg, Texas. The recent compromises have been executed through different methods, including social engineering, hardware theft and hacking, he noted. Wallace also pointed to the potential for insider abuse of system-access privileges.

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Security Tools Not Enough, Say Execs

SECURITY TOOLS play an important role in helping to protect corporate data. But technology fixes address only part of the overall security problem, according to several IT managers.

"Technological breakdowns are rarely the source of the breach," said Tim O'Pry, chief technology officer at The Hensaler Financial Group in Marietta, Ga. "More often than not, it's good old-fashioned human frailties."

Addressing that issue often requires companies to increase their investments in user awareness, training and education, said Matt Kesner, CTO at Fenwick & West LLP, a law firm in Mountain View, Calif.

Security managers "pay lip service to the issue but don't do a good job of training our users and employees," Kesner said. "A lot of people, even in senior positions, aren't aware of the threat every time you attach a computer to the Internet."

Arshad Noor, CEO of StrongAuth Inc., a vendor of identity and compliance management software and services in Cupertino, Calif., said security risk-mitigation efforts should be integral to every new IT initiative.

"If a business unit doesn't address potential vulnerabilities in its processes before it introduces a product to the market, it's not doing its job," Noor said. The same is true when IT systems and applications are being designed, he added.

From a technology standpoint, the recent security incidents at several companies highlight the need for IT managers to focus on end-user authentication and identity management, said Howard Schmidt, eBay's chief information security officer.

Schmidt said he thinks that in the future, companies will need to use more-robust two-factor authentication tools to vet access to confidential data.

There's also an urgent need for companies to pay more attention to protecting stored data in addition to controlling network access, said Gartner Inc. analyst John Pescatore. "The biggest attacks are taking place at the point where data is stored," he noted.

—Jaikumar Vijayan

Other Recent Data Losses

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Price of New RFID Tags Must Fall Fast For Users to Reap Rewards, Execs Say

Generation 2 technology is due later this year, holds promise to lower costs

BY CAROL SLIWA
CHICAGO

An emerging generatioo of radio frequency identificatioo tags promises reduced costs for manufacturers that have to put RFID labels on pallets and cases for retailers such as Wal-Mart Stores Inc. and Target Corp.

But that can't happen soon enough for many suppliers. Some IT executives said at last week's RFID Journal Live conference here that they have been studying business cases and exploring ways to use RFID data, and they have concluded that benefits won't materialize until tag costs dip below 10 cents.

"What Gen 2 is going to do, hopefully, is get everybody to use the same standard and consequently drive down the costs," said Gary Cooper, chief technology officer at Tysoo Foods Inc. "I need the cost to really drop because we're moving hundreds of millions of cases a year and we're a fairly low-margin business. Just do the math: 20 cents times hundreds of millions."

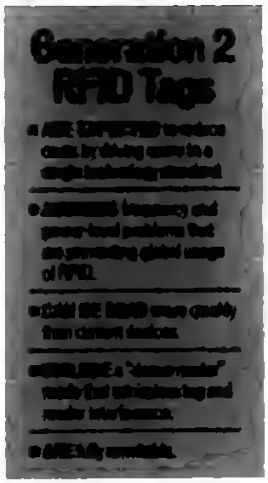
Return on Investment

Cooper said that about 90% of the pallets and cases Tyson ships to Wal-Mart's Dallas-area distribution centers are now tagged. He added that Springdale, Ark.-based Tyson has developed business-case models showing a payoff from RFID by late next year or, more probably, in 2007. But tag costs have to hit the single digits for the company to see a return on investment, he said.

EPCglobal Inc., a not-for-profit organization that establishes and promotes RFID technology standards, finalized the UHF Generation 2 standard in December, and the new tags are expected to become available later this year. Tag makers, consultants and retail IT analysts said it could take anywhere from one to five years for the cost of Gen 2 tags to drop to 10 cents each.

Edwin Matthews, director of information services at Pacific Cycle LLC in Madison, Wis., said that if tag costs don't drop to 7 cents within the next 18 to 24 months, he will need to "have discussions" with the retailers that are requesting usage of RFID technology.

Matthews said that he has no quibble with the mandates



and hopes more retailers hop on the RFID bandwagon to help drive up volume and lower the price of tags. "The cost," he noted, "truly is the tags."

Business Cases Solidify

Jeff Woods, an analyst at Gartner Inc., said tag cost has become a much bigger issue than it was nine months ago, now that some suppliers have developed poteotially solid business cases for RFID.

"Six to nine months ago, the business cases were hope and faith," Woods said. "Today, we've got some reasonable leads on what the business cases would be, but they don't have a chance of clearing the existing tag costs."

For suppliers that ship only a small percentage of tagged pallets and cases to Wal-Mart, the payoff is farther away.

"There's not much use to the data until we can get to higher volumes," said an RFID project manager at a large maker of consumer products that is shipping only a limited amount of tagged cases and pallets to Wal-Mart. But large volumes won't be feasible until tag prices sink to the single digits, added the project manager, who asked not to he identified.

"This is the ultimate chicken-and-egg scenario," said Dennis Gaughan, an analyst at AMR Research Inc. in Boston. "More people won't do RFID until the tag costs come down, but the tag costs won't come down until more people do it. These guys are in a bad situation."

53808

Sun Readies New Utility Computing Tools but Limits Hardware Support

Says it will first support apps on its systems only

BY MATT HAMBLEN

Sun Microsystems Inc. in the next 60 to 90 days will announce new and upgraded utility computing tools designed to help users deploy software and monitor applications, among other tasks. But the products will initially run only on the company's own hardware, a Sun executive said last week.

The planned announcement comes nearly a year after Sun de-emphasized the marketing of the existing versions of its N1 utility computing software, said John Loiacono, the company's executive vice president for software. He added, though, that Sun has continued to develop scaled-down releases of the technology.

"We had fallen prey to the hype," Loiacono said. "We've taken the N1 effort and dramatically simplified it. A year ago, utility and on-demand computing was going to boil the ocean and solve world hunger, but we've decided we're going to feed our family before we feed the world."

At first, the new tools will work on Sun hardware running Solaris 10 or Red Hat Linux, Loiacono said. Sun will build in support for hardware from other vendors later, but that won't happen this year, he added.

The tools, including one code-named Hot Dog that Sun is now beta-testing, will provide systems and application management capabilities, such as provisioning of servers running Solaris and Red Hat and automatic installs of software patches and updates.

James Dobson, a systems architect at Dartmouth College in Hanover, N.H., is testing Hot Dog and said he would like to use the software to control 64 dual-processor IBM servers that the school recently purchased. The Opteron-based systems are distributed among different departments on the Dartmouth campus and are routinely used as shared resources for complex scientific computations.

Dobson noted, though, that he will apparently have to wait until next year for a multivendor version of the software. "Sun has some great products, but they have all kinds of fun, grandiose visions that don't work very well with other vendors' products," he said.

Several users questioned the reality of the on-demand vision that's being espoused by IT vendors.

"We absolutely have a need for on-demand computing, but none of the vendors has it right yet," said Joe Poole, manager of technical support at Boscov's Department Store LLC, a 41-store retail chain based in Reading, Pa. He added that "nobody is really telling us what we need" to marshal computing resources on an as-needed basis, other than network monitoring tools.

Sun had indicated a year ago that it was backpedaling on its grand vision for making N1 interoperable with other hardware platforms, said Jonathan Eunice, an analyst at Illuminata Inc. in Nashua, N.H. Company executives "realized how hard it is to do on-demand on a broader scale," he said.

But management tools that can control a range of system components from multiple vendors are already being sold by companies such as IBM, Hewlett-Packard Co. and Computer Associates International Inc., according to Eunice and other analysts.

53774

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SUN BY THE NUMBERS

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From a technology standpoint, the recent security incidents at several companies highlight the need for IT managers to focus on end-user authentication and identity management, said Howard Schmidt, eBay's chief information security officer.

Schmidt said he thinks that in the future, companies will need to use more-robust two-factor authentication tools to vet access to confidential data.

There's also an urgent need for companies to pay more attention to protecting stored data in addition to controlling network access, said Gartner Inc. analyst John Pescatore. "The biggest attacks are taking place at the point where data is stored," he noted.

– Jaikumar Vijayan

Other Recent Data Losses

	LexisNexis Group (Miamisburg, Ohio)	San Jose Medical Group Management Inc.	Tufts University (Medford, Mass.)
WHO			
WHAT	The data broker said information on 310,000 people may have been taken – 10 times more than its earlier count.	It disclosed the theft of two PCs containing medical information and the Social Security numbers of 185,000 patients.	The school notified about 106,000 alumni and donors that their personal data may have been exposed.
HOW	Hackers used stolen IDs and passwords to access databases 59 times over a two-year period.	The desktop computers were stolen from a locked administrative office during a burglary.	An externally managed server used for fund-raising purposes may have been compromised by hackers.

Price of New RFID Tags Must Fall Fast For Users to Reap Rewards, Execs Say

Generation 2 technology is due later this year, holds promise to lower costs

BY CAROL SLIWA
CHICAGO

An emerging generation of radio frequency identification tags promises reduced costs for manufacturers that have to put RFID labels on pallets and cases for retailers such as Wal-Mart Stores Inc. and Target Corp.

But that can't happen soon enough for many suppliers. Some IT executives said at last week's RFID Journal Live conference here that they have been studying business cases and exploring ways to use RFID data, and they have concluded that benefits won't materialize until tag costs dip below 10 cents.

"What Gen 2 is going to do, hopefully, is get everybody to use the same standard and consequently drive down the costs," said Gary Cooper, chief technology officer at Tyson Foods Inc. "I need the cost to really drop because we're moving hundreds of millions of cases a year and we're a fairly low-margin business. Just do the math: 20 cents times hundreds of millions."

Return on Investment

Cooper said that about 90% of the pallets and cases Tyson ships to Wal-Mart's Dallas-area distribution centers are now tagged. He added that Springdale, Ark.-based Tyson has developed business-case models showing a payoff from RFID by late next year or, more probably, in 2007. But tag costs have to hit the single digits for the company to see a return on investment, he said.

EPCglobal Inc., a not-for-profit organization that establishes and promotes RFID technology standards, finalized the UHF Generation 2 standard in December, and the new tags are expected to become available later this year. Tag makers, consultants and retail IT analysts said it could take anywhere from one to five years for the cost of Gen 2 tags to drop to 10 cents each.

Edwin Matthews, director of information services at Pacific Cycle LLC in Madison, Wis., said that if tag costs don't drop to 7 cents within the next 18 to 24 months, he will need to "have discussions" with the retailers that are requesting usage of RFID technology.

Matthews said that he has no quibble with the mandates and hopes more retailers hop on the RFID bandwagon to help drive up volume and lower the price of tags. "The cost," he noted, "truly is the tags."

Business Cases Solidify

Ieti Woods, an analyst at Gartner Inc., said tag cost has become a much bigger issue than it was nine months ago, now that some suppliers have developed potentially solid business cases for RFID.

"Six to nine months ago, the business cases were hope and faith," Woods said. "Today, we've got some reasonable leads on what the business cases would be, but they don't have a chance of clearing the existing tag costs."

For suppliers that ship only a small percentage of tagged pallets and cases to Wal-Mart, the payoff is farther away.

"There's not much use to the data until we can get to higher volumes," said an RFID project manager at a large maker of consumer products that is shipping only a limited amount of tagged cases and pallets to Wal-Mart. But large volumes won't be feasible until tag prices sink to the single digits, added the project manager, who asked not to be identified.

"This is the ultimate chicken-and-egg scenario," said Dennis Gaughan, an analyst at AMR Research Inc. in Boston. "More people won't do RFID until the tag costs come down, but the tag costs won't come down until more people do it. These guys are in a bad situation."

53808

Generation 2 RFID Tags

- **ARE EXPECTED** to reduce costs by driving users to a single technology standard.
- **ADDRESS** frequency and power-level problems that are preventing global usage of RFID.
- **CAN BE READ** more quickly than current devices.
- **INCLUDE** a "dense reader" mode that minimizes tag and reader interference.
- **ARE** fully rewritable.

Sun Readies New Utility Computing Tools but Limits Hardware Support

Says it will first support apps on its systems only

BY MATT HAMBLEN

Sun Microsystems Inc. in the next 60 to 90 days will announce new and upgraded utility computing tools designed to help users deploy software and monitor applications, among other tasks. But the products will initially run only on the company's own hardware, a Sun executive said last week.

The planned announcement comes nearly a year after Sun de-emphasized the marketing of the existing versions of its N1 utility computing software, said John Loiacono, the company's executive vice president for software. He added, though, that Sun has continued to develop scaled-down releases of the technology.

"We had fallen prey to the hype," Loiacono said. "We've taken the N1 effort and dramatically simplified it. A year ago, utility and on-demand computing was going to boil the ocean and solve world hunger, but we've decided we're going to feed our family before we feed the world."

At first, the new tools will work on Sun hardware running Solaris 10 or Red Hat Linux, Loiacono said. Sun will build in support for hardware from other vendors later, but that won't happen this year, he added.

SUN'S JOHN LOIACONO: "We had fallen prey to the hype" about utility computing.

The tools, including one code-named Hot Dog that Sun is now beta-testing, will provide systems and application management capabilities, such as provisioning of servers running Solaris and Red Hat and automatic installs of software patches and updates.

James Dobson, a systems architect at Dartmouth College in Hanover, N.H., is testing Hot Dog and said he would like to use the software to control 64 dual-processor IBM servers that the school recently purchased. The Opteron-based systems are distributed among different departments on the Dartmouth campus and are routinely used as shared resources for complex scientific computations.

Dobson noted, though, that he will apparently have to wait until next year for a multivendor version of the software. "Sun has some great products, but they have all kinds of fun, grandiose visions that don't work very well with other vendors' products," he said.

Several users questioned the reality of the on-demand vision that's being espoused by IT vendors.

"We absolutely have a need for on-demand computing, but none of the vendors has it right yet," said Joe Poole, manager of technical support at Boscov's Department Store LLC, a 41-store retail chain based in Reading, Pa. He added that "nobody is really telling us what we need" to marshal computing resources on an as-needed basis, other than network monitoring tools.

Sun had indicated a year ago that it was backpedaling on its grand vision for making N1 interoperable with other hardware platforms, said Jonathan Eunice, an analyst at Illuminata Inc. in Nashua, N.H. Company executives "realized how hard it is to do on-demand on a broader scale," he said.

But management tools that can control a range of system components from multiple vendors are already being sold by companies such as IBM, Hewlett-Packard Co. and Computer Associates International Inc., according to Eunice and other analysts.

53774

READ MORE ONLINE

For additional coverage of on-demand computing, go to our Web site.

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www.computerworld.com

BRIEFS

Microsoft, Gateway Reach Settlement

Microsoft Corp. and Gateway Inc. have agreed to settle all past legal issues arising from the U.S. antitrust case against the software maker. Microsoft will pay Gateway $150 million over four years to market and develop products that run its software. In exchange, Irvine, Calif.-based Gateway is dropping all antitrust claims based on past conduct.

AMD Blames Flash Memory for Losses

Growing losses from its Spansion flash memory business contributed to a second consecutive quarterly net loss at Advanced Micro Devices Inc. The Sunnyvale, Calif.-based chip maker also disclosed plans to spin off its share of the Spansion business.

	$1.2B	($17M)
	$1.2B	545M

Apple Schedules OS X Tiger Ship

Apple Computer Inc. said its next-generation operating system, Mac OS X Tiger, will start shipping on April 29. The $129 operating system is said to include hundreds of enhancements. Tiger requires 256MB of memory and can run on Macintosh computers' PowerPC G3, G4 or G5 processors.

Cisco Buys Topspin For $250 Million

Cisco Systems Inc. has agreed to buy server networking equipment provider Topspin Communications Inc. for $250 million in cash and options. Mountain View, Calif.-based Topspin sells programmable server switches used in systems from several vendors, including Dell Inc., Hewlett-Packard Co., IBM and Sun Microsystems Inc. Buying Topspin adds a line of InfiniBand switches to Cisco's portfolio.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW CAVANAUGH

PowerPC Gives Edge to Security . . .

. . . appliances that must instantly evaluate the dangers in the endless streams of network packets. Some developers claim that the PowerPC, a general-purpose microprocessor that was designed by IBM and Motorola Inc. and that Apple Computer Inc. has long used in its Macintosh systems, has distinct advantages when it comes to security monitoring and management over, say, Intel Corp.'s CPUs. In part, that's because of the PowerPC's more liberal caching scheme, says Dave Lapp, chief technology officer at Seaway Networks Inc. in Ottawa. Lapp says designers like him can engineer the chip's specialized Level 3 cache to inspect packets without having to wait for data to transfer in and out of the computer's memory. That makes the technology ideal for running network security software, Lapp says. Lapp's company sells boards with the PowerPC and proprietary application-specific chips for use by security appliance makers.

Bivio Networks Inc. in Pleasanton, Calif., competes with Seaway, selling specialized security hardware that's also based on the PowerPC. Paul Leisenberg, Bivio's vice president of marketing, hails the processor for its "better thermals" compared with Intel chips, saying they let his company's engineers pack four CPUs on its boards.

Putting more processing power on a single card dedicated to managing network security portends a trend toward consolidating various security functions into a single box. That includes firewall capabilities, intrusion detection, virus protection and possibly compliance monitoring. Leisenberg thinks this new breed of security hardware is fast approaching. He points to a recent product release by Sourcefire Inc. [QuickLink 53488] as a major step in that direction. "It's not the death knell for the specialized appliance, yet," Lapp concludes. "But in five years, we'll look back and wonder why everything was separate."

PowerPC-based security x4 from Bivio

32% Users with no VoIP quality-testing plan in Empirix poll.

Juggling open-source software stacks . . .

. . . isn't fun. That's why SpikeSource Inc. in June will ship a tested, validated and supported combination of free open-source tools such as MySQL, JBoss, Python and PHP. According to Nick Halsey, vice president of sales and marketing at the Redwood City, Calif.-based company, SpikeSource keeps track of the release and patch cycle for each of the technologies. It also tests changes to ensure that an update to one component doesn't hamper something else. Halsey says the company will throw in an automated installer and management tools. It plans to charge $295 a year for the update service. The current beta of the SpikeSource stack runs on five versions of Linux and Windows.

Would you put a VoIP phone on your CEO's . . .

. . . desk? No way, say 63% of the 177 folks polled by Empirix Inc. at a voice-over-IP conference in February. While amusing, that's not the stat that worries Jeff Fried, chief technology officer at the Bedford, Mass.-based software vendor. Fried says that of the 150 companies in his survey, 98% are in the midst of VoIP deployments or have plans for them. And yet one-third of them don't have a quality-of-service (QoS) testing plan. Fried has a vested interest given that his company sells a line of testing tools called Hammer. That said, he rightly notes that "voice is a different animal." For example, he points out that dial tone and voice traffic run over different parts of the IP stack. Setting QoS parameters for one doesn't set them for the other. And there are more pitfalls. Maybe that's why all those CEOs aren't getting VoIP phones.

PowerPoint users give 30M presentations . . .

. . . every day. So says *Presentations* magazine. And Sonic Foundry Inc. wants talking heads to save their live audio/video performances along with the slide show. You'll probably agree with James Dias, vice president of marketing at the Madison, Wis.-based vendor, that not every one of those 30 million presentations needs his company's technology. But for training, distance learning and other applications, it makes sense. It makes more sense if, as Dias claims, you don't need specialized A/V or graphics skills to create a watchable presentation. The company's Rich Media Recorder appliances synchronize A/V feeds with material on the presenter's computer screen. You use templates to format and display presentations. This week, Sonic Foundry plans to release its LX Rich Media Server software for handling content management, workflow, delivery, archiving and security. Pricing starts at $7,950. **IDG 53783**

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BRIEFS

Dual-Core CPU Sent To Manufacturers

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Microsoft Checks On New Office Flaw

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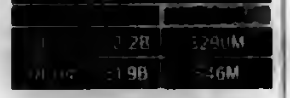
Apple Q2 Revenue Rises by 70%

Apple Computer Inc. beat analysts' expectations, reporting dramatically higher second-quarter earnings and a 70% increase in revenue, which was the result of significant increases in Macintosh computer and iPod shipments.



Acer to Unveil Pentium D Desktop

Acer Inc. has disclosed plans to announce a desktop PC based on Intel's dual-core Pentium D processor in late May. Acer's new Aspire PC was mentioned by Abhi Talwalkar, general manager of Intel's Digital Enterprise Group, during the Intel Developer Forum in Taipei. Acer plans to announce the PC at the Computex show in Taipei, which starts May 31.

Enterprise BI Slow To Catch On for SAS

Many users expect only high-end tools from vendor

BY HEATHER HAVENSTEIN
PHILADELPHIA

ONE YEAR after it entered the enterprise business intelligence market, Cary, N.C.-based SAS Institute Inc. is drawing mixed reviews from users on its effort to expand from its traditional stronghold of high-end analytics.

Enterprise BI took center stage here last week at the SAS Users Group International conference, as SAS rolled out enhanced user interfaces to ease querying and reporting for business users in the SAS 9 platform, which was unveiled in 2004.

Kevin Dahnert, assistant director for programming at Lake Forest, Ill.-based pharmaceutical company NeoPharm Inc., said he uses internal programming processes rather than SAS 9 to generate reports for executives summarizing clinical study analysis data generated in SAS's drug development analytical tool.

Waiting It Out

Joe Brenner, a statistician at the Office of the Actuary in the Centers for Medicare & Medicaid Services in the U.S. Department of Health and Human Services, said his office hasn't yet upgraded from SAS 8 to SAS 9. He's waiting to ensure that it meets expectations.

"It generally doesn't pay to be first," Brenner said. "Every major release [from SAS has had] problems initially, and then they get squared away."

SAS made its first foray into the enterprise BI market in March 2004, when it began shipping SAS 9. Since then, it has been ratcheting up efforts to overcome its reputation as a vendor of complex analytic forecasting and modeling tools for statisticians and other power users.

Canada Post Corp. is rolling out SAS 9 as its BI infrastructure for a program it hopes to have under way by September.

Gabriel Toichoa, director of pricing and modeling at Canada's Ottawa-based postal service, said his organization chose SAS 9 over tools from Cognos Inc. and Business Objects SA at the end of last year because of its ability to perform high-end analytics and support business users.

Canada Post plans to use the platform to create complex pricing models and to predict what types of customers will be most likely to buy certain products.

Some SAS 9 users acknowledged that they were primarily attracted to the high-end analytic tools.

Apex Management Group Inc., a health care consulting company in Princeton, N.J., rolled out tools from SAS 9 for predictive analysis for its clients in November, though Apex will use Excel plug-ins for less technical users, said Jody Porrazzo, director of econometric risk strategy.

"We require very, very robust forecasting models," she said. "If you want to do slice and dice and do pretty graphics only, don't go to SAS, go somewhere else."

While SAS has made strides in simplifying the technology for business users, the company must still prove to users that its tools can be used for something other than complex statistical applications, said Keith Gile, an analyst at Forrester Research Inc. **53798**

ABN Amro Turns to Global Portfolio Management

BY THOMAS HOFFMAN

ABN Amro Bank NV has embarked upon what analysts described last week as one of the first global efforts to prioritize and monitor a portfolio of IT projects.

Late last year, the wholesale client services business unit for the Amsterdam-based bank began applying IT portfolio management techniques to prioritize hundreds of IT projects it has planned for this year, according to Ed Merchant, global head of vendor management for the wholesale bank in Jersey City, N.J.

The IT projects, which could affect business activities in any of the 55 countries where the ABN Amro division has operations, are supported by enterprise portfolio management software from Arlington, Va.-based Expert Choice Inc.

"We're very dependent on IT for the wholesale bank's product offerings," said Merchant. "There's almost nothing the business does that doesn't have an IT implication."

Howard Rubin, an analyst at Gartner Inc., said that while more than 80% of companies now claim to be using IT portfolio management techniques, fewer than 10% of multinational corporations employ them globally.

"It is rare and encouraging to see companies applying IT portfolio management techniques on a global scale," said Rubin.

It can also be useful for multinational operations like ABN Amro to apply IT portfolio management techniques across global business divisions, because organizational structures can vary from one location to another, noted Dana Gardner, an analyst at The Yankee Group in Boston.

Setting Priorities

One of the main reasons why ABN Amro adopted the portfolio management techniques was to help prioritize conflicting demands among business units, which often have their own agendas, said Merchant.

"When we get into a discussion over why Project A should be allocated more resources than Project B, we can use the software to remind people why those decisions were made and the criteria that was used," he said.

In September 2003, ABN Amro's wholesale banking division outsourced support of its IT infrastructure and applications development and maintenance to Electronic Data Systems Corp. under a five-year deal.

The portfolio management software prioritizes EDS development projects along with projects that fall outside of EDS's purview, according to Merchant.

A key benefit of the PC-based portfolio management software is that it cost ABN Amro less than $50,000 to install. It's also inexpensive to maintain, since it runs on laptops used by 10 senior IT managers within ABN Amro's wholesale client services IT division who represent different parts of the business, said Merchant.

"You can spend $50,000 bringing in a consulting firm for a couple of weeks and not have anything left but a recollection that they were in the chairs," he said. **53909**

IT ON TOBACCO ROAD
Government legislation drives IT governance in the state of North Carolina.
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Users Say Data Storage Needs Outpace Technology

Interoperability remains roadblock to utility storage

BY LUCAS MEARIAN
PHOENIX

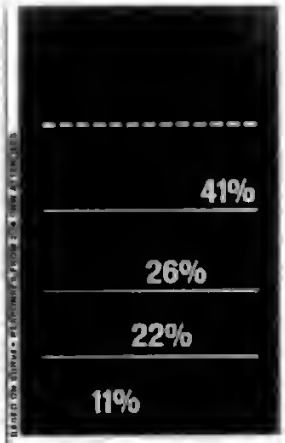
Users at Storage Networking World Spring 2005 here last week said the demand for more data storage capacity is outpacing their ability to consolidate storage infrastructures and improve system performance. That conflict, they said, comes even as backup and recovery windows are shrinking.

Some storage managers also said they are moving away from individual storage-component purchases so they can focus on architectures to handle specific business needs — not just individual user requests for increased storage capacity.

"My last challenge to the industry is to see how fast can you make [storage] cheaper and make storage retrieval faster and occupy less space in my data center, because I'm out of room," said Bob Eicholz, vice president of corporate development at Efilm LLC in Hollywood, Calif.

Efilm performs digital processing for movies and stores the data on a 200TB-plus storage-area network (SAN) from Silicon Graphics Inc.

Interoperability is still one of the main obstacles to a utility storage architecture, IT managers said at the conference, which was co-sponsored by *Computerworld* and the Storage Networking Industry Association.



Several users said they have moved away from vendors that overestimate how well their products perform and are insisting that vendors prove interoperability first.

Bob Shinn, a principal in the IT department at State Street Global Advisors, the investment arm of State Street Corp. in Boston, compared "blatant lying" about what works together in a SAN to forcing homogeneous storage architectures on users, since both make it costly to use other vendors' products.

Shinn, who manages the unit's storage systems, said his IT department has changed the way it thinks about technology. Instead of buying the latest products based on speeds and feeds, it now considers what business problem is being solved. Last fall, State Street consolidated seven SANs into a single, centralized location using switches from McData Corp. and storage from EMC Corp.

Shinn said his focus is on creating a business-oriented services model with sophisticated chargeback capability.

Steve Duplessie, founder of Enterprise Strategy Group Inc. in Milford, Mass., pointed out to conference attendees that Network Appliance Inc. was demonstrating how its virtualization technology supports EMC's Clariion arrays.

Meanwhile, 10 vendors, including IBM, Network Appliance, EMC, Sun Microsystems Inc., Veritas Software Corp. and Hitachi Data Systems Corp., announced support for the most recent release of the SNIA's storage management interoperability specification, SMI-S Version 1.0.2.

The latest version of the protocol allows interoperability between storage architectures and storage resource management software, which performs automatic discovery of hardware and performance monitoring of networks and equipment.

The protocol will also expand to include interoperability specifications between Internet SCSI devices and network-attached storage arrays, said Rick Bauer, SNIA's technical director.

Chris Wilson, a storage architect at MCI Inc., said that the specification should help him get services to his internal clients faster and that it ties in with MCI's model for automated services delivery. 53814

Vendors Unveil Remote Backup, iSCSI Systems

PHOENIX

Most of the users perusing the wares in the exhibition booths at Storage Networking World here last week were scouting out technologies to simplify increasingly complex storage environments.

And the vendors were displaying a variety of new products, including a backup and recovery application from Microsoft Corp. and a storage security appliance for iSCSI from Decru Inc.

Microsoft released an upgraded beta version of its Data Protection Manager for Windows, a disk-to-disk backup and recovery application for central and remote offices. The product will likely be generally available in the second half of this year, said Rakesh Narasimhan, general manager of Microsoft's enterprise storage division.

The upgrade adds support for Windows Server and Windows Storage Server 2003 on top of support for Windows 2003, which was announced in the fall.

The new version also includes desktop backup and recovery for end users, a feature that appeals to Robert Bledsoe, a network architect for the Des Moines public school system. "It's going to be easy to train our end users to restore their own files. It's very user-friendly," Bledsoe said.

Dan Warren, a network specialist for the Des Moines Public Schools, said he has been beta-testing the product since the fall and so far has it installed on 20 of 40 school servers running Windows 2000. Warren said he hopes to eventually deploy the application on 65 Windows 2003 servers in secondary schools and in a central server farm.

Warren had previously performed backups on aging direct-attached tape drives, which took about 36 hours every weekend and often included drive failures. He said the new disk-to-disk method will reduce his backup window to under 10 hours.

Warren and Bledsoe said they would like to see Microsoft extend its Data Protection Manager application to Windows 98 systems as well.

Meanwhile, Decru in Redwood City, Calif., brought out its first storage security appliance for iSCSI storage networks.

The entry-level Decru DataFort i115 device precedes the company's planned release of an enterprise-class appliance this summer. The device enables encryption key management of networks and devices. It's available now and retails for about $9,900.

– *Lucas Mearian*

HP 'Made a Good Choice,' Livermore Says

Declines comment on CEO candidacy

BY DON TENNANT
PHOENIX

At Storage Networking World, **Ann Livermore,** *executive vice president of Hewlett-Packard Co.'s Technology Solutions Group, spoke about HP's recent hiring of Mark Hurd as CEO. Excerpts from the interview follow:*

What's the buzz at HP now that Mark Hurd has taken over as CEO? The buzz is good. The customer and employee reaction to Mark has been positive. He clearly has a very strong operational background and a very deep knowledge of aspects of the computer industry. So he had a good match with the qualifications.

You were widely considered a top contender for the CEO position. Did the board approach you at any point to discuss the job? We're not making any comments on who were candidates and who weren't, or the speculation associated with it. But I will tell you that I think they made a good choice.

There's been a lot of speculation about whether it would make sense for HP to split up. What's your take on that? The company is focused on making sure we create good shareholder value. [Selling off parts of the company] is one option some analysts like. We believe that we've got a really strong portfolio and that there's value in the portfolio. We just have an opportunity to execute better and more consistently than we have. 53803

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BRIEFS

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APPLE BY THE NUMBERS

		PROFIT
Q1 '05	$3.2B	$290M
Q1 '04	$1.9B	$46M

Acer to Unveil Pentium D Desktop

Acer Inc. has disclosed plans to announce a desktop PC based on Intel's dual-core Pentium D processor in late May. Acer's new Aspire PC was mentioned by Abhi Talwalkar, general manager of Intel's Digital Enterprise Group, during the Intel Developer Forum in Taipei. Acer plans to announce the PC at the Computex show in Taipei, which starts May 31.

Enterprise BI Slow To Catch On for SAS

Many users expect only high-end tools from vendor

BY HEATHER HAVENSTEIN
PHILADELPHIA

One year after it entered the enterprise business intelligence market, Cary, N.C.-based SAS Institute Inc. is drawing mixed reviews from users on its effort to expand from its traditional stronghold of high-end analytics.

Enterprise BI took center stage here last week at the SAS Users Group International conference, as SAS rolled out enhanced user interfaces to ease querying and reporting for business users in the SAS 9 platform, which was unveiled in 2004.

Kevin Dahnert, assistant director for programming at Lake Forest, Ill.-based pharmaceutical company NeoPharm Inc., said he uses internal programming processes rather than SAS 9 to generate reports for executives summarizing clinical study analysis data generated in SAS's drug development analytical tool.

Waiting It Out

Joe Brenner, a statistician at the Office of the Actuary in the Centers for Medicare & Medicaid Services in the U.S. Department of Health and Human Services, said his office hasn't yet upgraded from SAS 8 to SAS 9. He's waiting to ensure that it meets expectations.

"It generally doesn't pay to be first," Brenner said. "Every major release [from SAS has had] problems initially, and then they get squared away."

SAS made its first foray into the enterprise BI market in March 2004, when it began shipping SAS 9. Since then, it has been ratcheting up efforts to overcome its reputation as a vendor of complex analytic forecasting and modeling tools for statisticians and other power users.

Canada Post Corp. is rolling out SAS 9 as its BI infrastructure for a program it hopes to have under way by September.

Gabriel Toichoa, director of pricing and modeling at Canada's Ottawa-based postal service, said his organization chose SAS 9 over tools from Cognos Inc. and Business Objects SA at the end of last year because of its ability to perform high-end analytics and support business users.

Canada Post plans to use the platform to create complex pricing models and to predict what types of customers will be most likely to buy certain products.

Some SAS 9 users acknowledged that they were primarily attracted to the high-end analytic tools.

Apex Management Group Inc., a health care consulting company in Princeton, N.J., rolled out tools from SAS 9 for predictive analysis for its clients in November, though Apex will use Excel plug-ins for less technical users, said Jody Porrazzo, director of econometric risk strategy.

"We require very, very robust forecasting models," she said. "If you want to do slice and dice and do pretty graphics only, don't go to SAS, go somewhere else."

While SAS has made strides in simplifying the technology for business users, the company must still prove to users that its tools can be used for something other than complex statistical applications, said Keith Gile, an analyst at Forrester Research Inc. **53798**

ABN Amro Turns to Global Portfolio Management

BY THOMAS HOFFMAN

ABN Amro Bank NV has embarked upon what analysts described last week as one of the first global efforts to prioritize and monitor a portfolio of IT projects.

Late last year, the wholesale client services business unit for the Amsterdam-based bank began applying IT portfolio management techniques to prioritize hundreds of IT projects it has planned for this year, according to Ed Merchant, global head of vendor management for the wholesale bank in Jersey City, N.J.

The IT projects, which could affect business activities in any of the 55 countries where the ABN Amro division has operations, are supported by enterprise portfolio management software from Arlington, Va.-based Expert Choice Inc.

"We're very dependent on IT for the wholesale bank's product offerings," said Merchant. "There's almost nothing the business does that doesn't have an IT implication."

Howard Rubin, an analyst at Gartner Inc., said that while more than 80% of companies now claim to be using IT portfolio management techniques, fewer than 10% of multinational corporations employ them globally.

"It is rare and encouraging to see companies applying IT portfolio management techniques on a global scale," said Rubin.

It can also be useful for multinational operations like ABN Amro to apply IT portfolio management techniques across global business divisions, because organizational structures can vary from one location to another, noted Dana Gardner, an analyst at The Yankee Group in Boston.

Merchant: The software can justify why one project gets more resources than another

Setting Priorities

One of the main reasons why ABN Amro adopted the portfolio management techniques was to help prioritize conflicting demands among business units, which often have their own agendas, said Merchant.

"When we get into a discussion over why Project A should be allocated more resources than Project B, we can use the software to remind people why those decisions were made and the criteria that was used," he said.

In September 2003, ABN Amro's wholesale banking division outsourced support of its IT infrastructure and applications development and maintenance to Electronic Data Systems Corp. under a five-year deal.

The portfolio management software prioritizes EDS development projects along with projects that fall outside of EDS's purview, according to Merchant.

A key benefit of the PC-based portfolio management software is that it cost ABN Amro less than $50,000 to install. It's also inexpensive to maintain, since it runs on laptops used by 10 senior IT managers within ABN Amro's wholesale client services IT division who represent different parts of the business, said Merchant.

"You can spend $50,000 bringing in a consulting firm for a couple of weeks and not have anything left but a recollection that they were in the chairs," he said. **53809**

IT ON TOBACCO ROAD

Government legislation drives IT governance in the state of North Carolina.

QuickLink 53811
www.computerworld.com

Users Say Data Storage Needs Outpace Technology

Interoperability remains roadblock to utility storage

BY LUCAS MEARIAN
PHOENIX

Users at Storage Networking World Spring 2005 here last week said the demand for more data storage capacity is outpacing their ability to consolidate storage infrastructures and improve system performance. That conflict, they said, comes even as backup and recovery windows are shrinking.

Some storage managers also said they are moving away from individual storage-component purchases so they can focus on architectures to handle specific business needs — not just individual user requests for increased storage capacity.

SHINN said purchases now reflect what business processes are being solved.

"My last challenge to the industry is to see how fast can you make [storage] cheaper and make storage retrieval faster and occupy less space in my data center, because I'm out of room," said Bob Eicholz, vice president of corporate development at Efilm LLC in Hollywood, Calif.

Efilm performs digital processing for movies and stores the data on a 200TB-plus storage-area network (SAN) from Silicon Graphics Inc.

Interoperability is still one of the main obstacles to a utility storage architecture, IT managers said at the conference, which was co-sponsored by Computerworld and the Storage Networking Industry Association.

What is your top challenge in storage management?

- Managing complexity of the storage infrastructure
- Reliable backup and recovery solutions
- IT budget constraints
- Reliability and availability

Several users said they have moved away from vendors that overestimate how well their products perform and are insisting that vendors prove interoperability first.

Bob Shinn, a principal in the IT department at State Street Global Advisors, the investment arm of State Street Corp. in Boston, compared "kissing and hugging" about what works together in a SAN to forcing homogenous storage architectures on users, since both make it costly to use other vendors' products.

Shinn, who manages the unit's storage systems, said his IT department has changed the way it thinks about technology. Instead of buying the latest products based on speeds and feeds, it now considers what business problem is being solved. Last fall, State Street consolidated seven SANs into a single, centralized location using switches from McData Corp. and storage from EMC Corp.

Shinn said his focus is on creating a business-oriented services model with sophisticated chargeback capability.

Steve Duplessie, founder of Enterprise Strategy Group Inc. in Milford, Mass., pointed out to conference attendees that Network Appliance Inc. was demonstrating how its virtualization technology supports EMC's Clariion arrays.

Meanwhile, 10 vendors, including IBM, Network Appliance, EMC, Sun Microsystems Inc., Veritas Software Corp. and Hitachi Data Systems Corp., announced support for the most recent release of the SNIA's storage management interoperability specification, SMI-S Version 1.0.2.

The latest version of the protocol allows interoperability between storage architectures and storage resource management software, which performs automatic discovery of hardware and performance monitoring of networks and equipment.

The protocol will also expand to include interoperability specifications between Internet SCSI devices and network-attached storage arrays, said Rick Bauer, SNIA's technical director.

Chris Wilson, a storage architect at MCI Inc., said that the specification should help him get services to his internal clients faster and that it ties in with MCI's model for automated services delivery. **53814**

Vendors Unveil Remote Backup, iSCSI Systems

PHOENIX

Most of the users perusing the wares in the exhibition booths at Storage Networking World here last week were scouting out technologies to simplify increasingly complex storage environments.

And the vendors were displaying a variety of new products, including a backup and recovery application from Microsoft Corp. and a storage security appliance for iSCSI from Decru Inc.

Microsoft released an upgraded beta version of its Data Protection Manager for Windows, a disk-to-disk backup and recovery application for central and remote offices. The product will likely be generally available in the second half of this year, said Rakesh Narasimhan, general manager of Microsoft's enterprise storage division.

The upgrade adds support for Windows Server and Windows Storage Server 2000 on top of support for Windows 2003, which was announced in the fall.

The new version also includes desktop backup and recovery for end users, a feature that appeals to Robert Bledsoe, a network architect for the Des Moines public school system. "It's going to be easy to train our end users to restore their own files. It's very user-friendly," Bledsoe said.

Dan Warren, a network specialist for the Des Moines Public Schools, said he has been beta-testing the product since the fall and so far has it installed on 20 of 40 school servers running Windows 2000. Warren said he hopes to eventually deploy the application on 65 Windows 2003 servers in secondary schools and in a central server farm.

Warren had previously performed backups on aging direct-attached tape drives, which took about 36 hours every weekend and often included drive failures. He said the new disk-to-disk method will reduce his backup window to under 10 hours.

Warren and Bledsoe said they would like to see Microsoft extend its Data Protection Manager application to Windows 98 systems as well.

Meanwhile, Decru in Redwood City, Calif., brought out its first storage security appliance for iSCSI storage networks.

The entry-level Decru DataFort i115 device precedes the company's planned release of an enterprise-class appliance this summer. The device enables encryption key management of networks and devices. It's available now and retails for about $9,900.

– Lucas Mearian

HP 'Made a Good Choice,' Livermore Says

Declines comment on CEO candidacy

BY DON TENNANT

At Storage Networking World, **Ann Livermore** *executive vice president of Hewlett-Packard Co.'s Technology Solutions Group spoke about HP's recent hiring of Mark Hurd as CEO. Excerpts from the interview follow.*

What's the buzz at HP now that Mark Hurd has taken over as CEO? The buzz is good. The customer and employee reaction to Mark has been positive. He clearly has a very strong operational background and a very deep knowledge of aspects of the computer industry. So he had a good match with the qualifications.

You were widely considered a top contender for the CEO position. Did the board approach you at any point to discuss the job? We're not making any comments on who were candidates and who weren't, or the speculation associated with it. But I will tell you that I think they made a good choice.

There's been a lot of speculation about whether it would make sense for HP to split up. What's your take on that? The company is focused on making sure we create good shareholder value. [Selling off parts of the company] is one option some analysts like. We believe that we've got a really strong portfolio and that there's value in the portfolio. We just have an opportunity to execute better and more consistently than we have. **53803**

READ MORE ONLINE

Read an extended version of this interview.

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Microsoft

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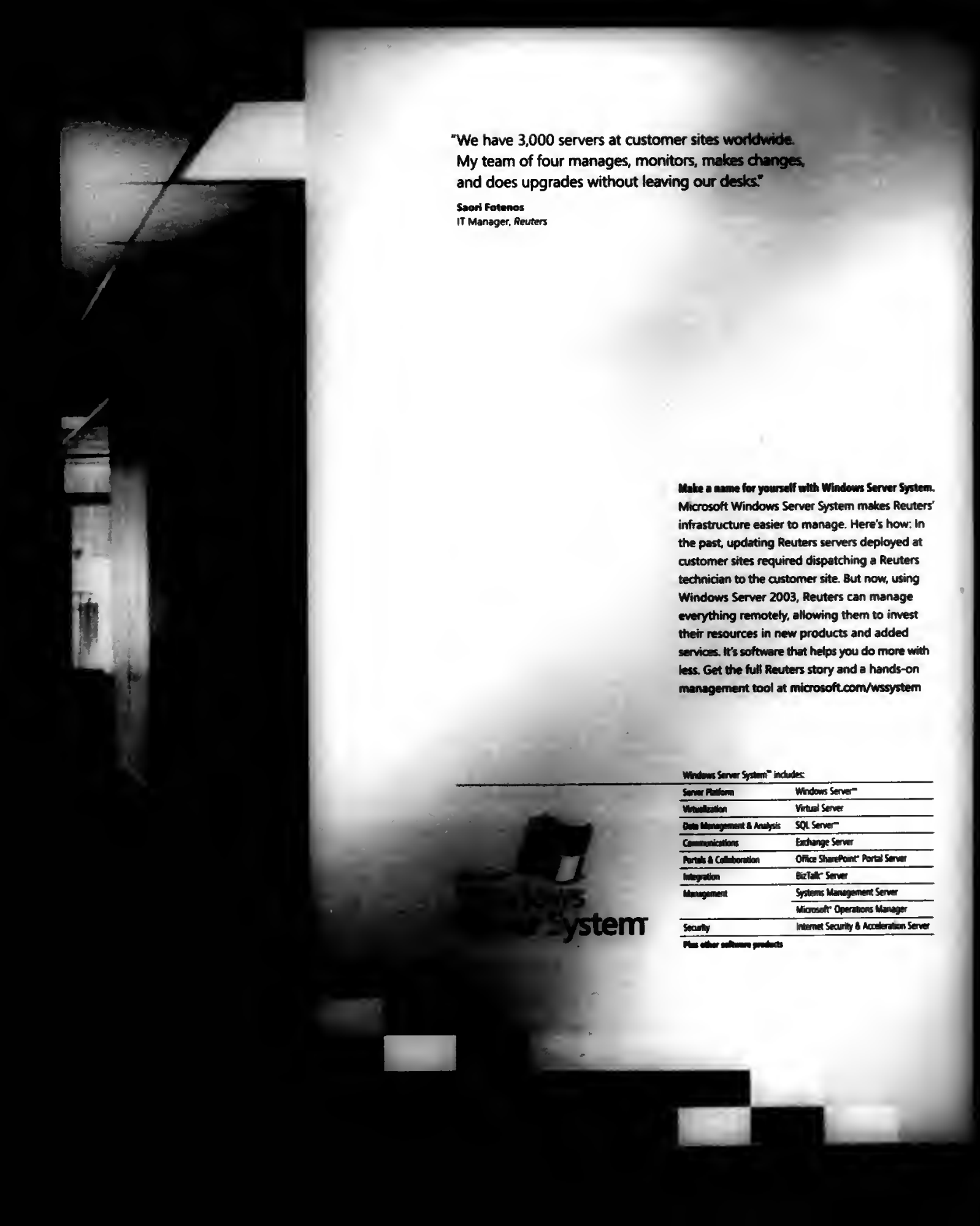
REUTERS



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Saori Fotenos
IT Manager, *Reuters*

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GLOBAL

An International IT News Digest

China, India Envision 'Asian Century' for IT

BANGALORE, INDIA

THE COMBINATION of Indian software skills and Chinese hardware expertise could make China and India leaders in the worldwide IT industry, Chinese Premier Wen Jiabao said last week in Bangalore, India. "When that particular day comes, it will signify the coming of the Asian century of the IT industry," he said.

The IT industries of the two neighboring countries until recently remained separate because of a border dispute. But now, as the two governments work to resolve political disagreements, some cross-pollination of their IT industries has begun.

For example, Indian IT outsourcing firms such as Tata Consultancy Services Ltd., Wipro Ltd. and Infosys Technologies Ltd. have set up software development operations in China. And Huawei Technologies Co., a Chinese networking equipment vendor, has a research center in Bangalore.

"We have to stop looking at China as only competition and instead look at China as a big market for us," said Subramanian Ramadorai, CEO of Mumbai-based Tata.

■ JOHN RIBEIRO, IDG NEWS SERVICE

GLOBAL FACT

Percentage growth of Australia's enterprise IP telephony market in 2004

Russia Hopes IT-Friendly Policies Help Economy

LONDON

TRYING TO BOOST its economy and reduce its dependence on natural resources like oil, Russia has made local IT development a top priority, with plans for regional "technoparks" and industry-friendly legislation. "IT is Russia's next natural resource," Leonid Reiman, the country's technology minister, said at the Russian Economic Forum here last week.

The government has earmarked $650 million for high-tech initiatives such as the e-Russia program, which includes e-government services and electronic medical records. The country's IT push still faces significant challenges, including limited funds, an uncertain business climate, corruption and growing cybercrime. "Everybody knows Russians have always been good at mathematics, and our software writers are highly trained. That's why our hackers are the best in the world," said Boris Miroshnikov, head of the Russian police force's cybercrime unit.

■ SCARLET PRUITT, IDG NEWS SERVICE

Aussie Agencies Get Open-Source Guide

SYDNEY

THE AUSTRALIAN Government Information Management Office plans to release guidelines this week that put open-source software on equal footing with proprietary software for government IT contracts. The document, "A Guide to Open Source Software," states that if an open-source product adequately fits the government's needs, public agencies must objectively consider it alongside proprietary offerings.

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■ JULIAN BAJKOWSKI, COMPUTERWORLD TODAY (AUSTRALIA)

Compiled by Mitch Betts.

Briefly Noted

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■ JOHN BLAU, IDG NEWS SERVICE

The European Commission has urged telecommunications and utilities regulators in Europe to remove "any unjustified regulatory obstacles" that would inhibit development of broadband Internet access over power transmission lines.

■ SIMON TAYLOR, IDG NEWS SERVICE

Continued from page 1

DOD

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The DISA contract to be announced today is worth more than $2 million over five years — perhaps the biggest deal for registry technology to date — and signifies a critical mass of Web services at the DOD, said Anne Thomas Manes, an analyst at Burton Group in Midvale, Utah. Manes previously was chief technology officer at Systinet.

The latest contract is unrelated to an early 2004 deal under which Systinet customized its Web services development tool for DISA.

A registry houses centralized metadata describing the location of Web services and policies governing their use.

"We're seeing the registry being positioned as the heart of the service-oriented architecture," Vietmeyer said. "If the SOA requires governance ... you can only govern those things you can have visibility across. We don't have good visibility across the department today."

Several hundred Web services exist across the DOD. Some agencies expect to have 150 to 200 available by the end of the year, Vietmeyer said.

The Systinet technology will let the DOD classify Web services and their associated policies, said Dave Butler, Systinet vice president of marketing. He added that it can insert a policy into a Web service at runtime. For example, a Web service published by the Army to check weapons inventory could be restricted only to logistics users, he said.

The DISA registry project represents a big commitment by the U.S. government to SOA use and is a bellwether for other federal agencies, said Ron Schmelzer, an analyst at ZapThink LLC in Waltham, Mass.

"If the DOD can show this is a success ... then a lot of agencies are going to want to do that," Schmelzer said.

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The DOD is still hammering out the details of all of the policies surrounding its use of Web services, Vietmeyer said. DISA has begun working with a team from the department's CIO office to develop a profile for the interoperability of Web services, he said.

Some of the most vexing challenges regarding the use of Web services will be setting policies for security, mainly access control and authentication, Vietmeyer noted.

"We're moving from a client/server environment where we had tightly coupled enclaves ... to say we need to make this information available to users," he said. **53812**

DOD's Web Services Registry

- Universal Description, Discovery and Integration (UDDI) version 3 support for discovery of Web services
- Mapping of quality of service management [illegible]
- Support for the security and [illegible] access to services
- The ability to discover business [illegible] with the ability to understand the underlying UDDI data structure

GLOBAL

An International IT News Digest

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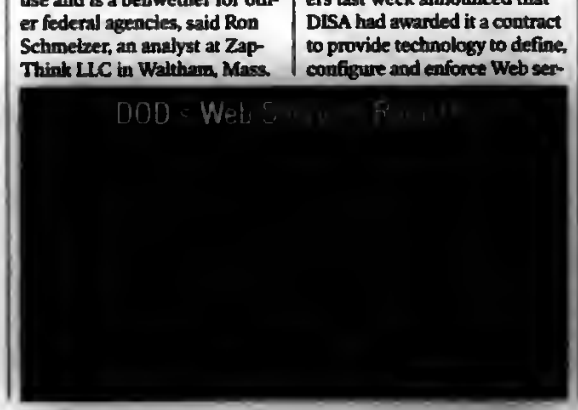

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CDW

Firms in India Seek Better Background-Check System

BY PATRICK THIBODEAU

India's technology firms are creating a centralized employee information depository, with employment, education and even credit histories, for conducting employee background checks.

The issue of background checks for Indian technology job candidates arose this month after 12 people were arrested for allegedly defrauding four Citibank account holders in New York of more than $300,000. Three of those arrested were former call center employees of Mphasis BFL Group in Mumbai [QuickLink 53634].

This depository, to be launched as a pilot over the next two months by the Delhi-based National Association of Software and Service Companies (Nasscom), India's major technology trade group, is designed to fix a problem in the developing country: a lack of centralized personal data.

In the U.S., employers can use so-called data brokers, including two that recently reported security breaches — ChoicePoint Inc. and LexisNexis Group — to get background information on job candidates. But India doesn't have centralized, national databases. In fact, it wasn't until last year that a national credit-reporting agency, the Credit Information Bureau of India Ltd., was formed to gather data on Indian citizens.

Without access to that type of data, Subbu Venkataraman, a vice president at Sierra Atlantic Inc., a Fremont, Calif.-based provider of offshore IT services, depends on former employers and third-party firms to check the references of Indian job candidates.

Once someone applies for a job at a Sierra Atlantic Indian facility, the company checks his qualifications with previous employers, said Venkataraman in an interview from India. A third-party reference-checking firm is also used, and job candidates may be asked to provide paper documents, such as credit card bills and bank records, to help verify their credit histories, he said.

Sierra Atlantic's process is "an India solution for an India problem. It seems to be working fine," said Venkataraman.

Safeguards in Place

As envisioned, the Nasscom program would allow technology workers to voluntarily register in the database, said Nasscom Vice President Sunil Mehta. The registry will be administered by a third party that will hire a professional reference-checking company to conduct background checks, he said.

Jeroen Tas, vice chairman of Mphasis, said the theft of data from his firm may be the result of someone getting customers' phone numbers and calling them outside of Mphasis facilities to gain personal identification numbers for account access. "Clearly, it is important that we keep reminding everybody that they shouldn't give out PINs," he said.

Mphasis doesn't allow its business process outsourcing employees to bring in any media that can be used to copy files, and calls are monitored, Tas said.

Background checks don't necessarily weed out problems, said Bruce Schneier, chief technology officer at Counterpane Internet Security Inc. in Mountain View, Calif. "Sure, they'll find known criminals," he said, "but they won't find people with no criminal records who might steal money when the opportunity arises."

Reference checks didn't turn up any problems with the arrested employees, Tas said.

It may be up to employers to sort out best practices in dealing with offshore firms. The Financial Services Technology Consortium was developing offshore standards over issues such as the handling of live data [QuickLink 42182]. But it dropped the project because member financial services firms worried that any best-practice book could be used by federal authorities to develop more-stringent regulations, said Jim Salters, director of technology initiatives for the FSTC. **53617**

India Is Hiring

Indian outsourcer Infosys Technologies Ltd. reported revenue of $1.6 billion for its fiscal year, which ended March 31. That's a 50% increase from the previous year.

March 2004 head count:
25,634

March 2005 head count:
36,750

[illegible] INCREASE

Continued from page 1

E-voting

count votes in five local elections, with a boiling point reached in a countywide March 8 special election.

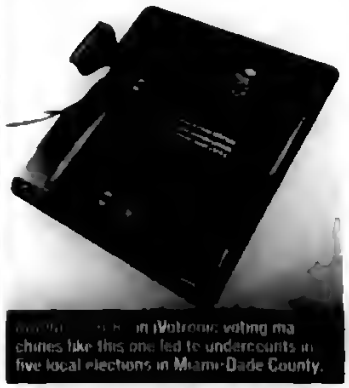
The latest snafu — in which a glitch caused hundreds of votes to be uncounted, prompting the subsequent resignation of county elections supervisor Constance Kaplan — left Miami-Dade officials considering a possible switch to optical scanning equipment.

Officials said the miscount didn't influence the result of last month's election.

However, "if you talk to a number of people, they have lost confidence and are cynical about whether their votes count," said Miami-Dade County Mayor Carlos Alvarez. "That has to be changed. We need to do something where we can restore the confidence of the people in the electoral process. That boils down to the equipment. The equipment is problematic."

He also emphasized that "people want some sort of backup, a hard copy on paper," which is unavailable with the touch-screen machines.

With backing from Alvarez, County Manager George Burgess on April 4 issued a memorandum instructing newly appointed Supervisor of Elections Lester Sola to undertake a comprehensive review of the county's voting-related processes, including the way it manages system coding and staff training.



[illegible] in iVotronic voting machines like this one led to undercounts in five local elections in Miami-Dade County.

Burgess also urged Sola to "assess the desirability and feasibility of replacing the county's touch-screen electronic voting system with an optical scan system."

In adjacent Broward County, which also uses iVotronic machines, optical scanning would have been preferable from the start of electronic voting, said Mayor Kristin Jacobs.

The optical gear might have been considered after the 2000 election debacle, she noted, but the state's 2002 deadline to automate voting systems left county officials scrambling to meet the timetable rather than taking time to carefully evaluate all options.

Budgetary constraints — the county has already spent $17 million on the new systems — now prevent it from replacing the new e-voting machines with optical scanners, Jacobs said.

She added that she is now pushing to get the state's approval to use printers with the touch-screen machines.

Sola said Miami-Dade's problems resulted from human errors. The e-voting equipment "is working as required," he said. Nevertheless, optical technology could cut costs and would provide hard-copy records of votes.

The punch-card-based system cost $1 million to $2 million per election. The iVotronic system, which includes 7,200 machines, cost $6.6 million in the November election. Part of that cost was the result of having to transport the machines back and forth securely to the voting precincts, which required temporary help and trucks.

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Explaining why Miami-Dade didn't turn to optical scanning equipment in the first place, Sola said officials viewed it as just a newer variation of the faulty punch-card technology because it included paper. "We've learned a lot," he said. "It's healthy to look at options."

For its part, iVotronic vendor ES&S emphasized that responsibility for the coding errors lie with the county itself. "ES&S values our relationship with Miami-Dade County and [is] very proud of the work we have done together over the years to greatly enhance the county's voting process," the company said in an e-mail statement.

Sola is due to deliver a report on his review of the voting process to the county manager on May 27. **53613**

Firms in India Seek Better Background-Check System

BY PATRICK THIBODEAU

India's technology firms are creating a centralized employee information depository, with employment, educatioo and even credit histories, for conducting employee background checks.

The issue of background checks for Indian technology job candidates arose this month after 12 people were arrested for allegedly defrauding four Citibank account holders in New York of more than $300,000. Three of those arrested were former call center employees of Mphasis BFL Group in Mumbai [QuickLink 53634].

This depository, to be launched as a pilot over the next two months by the Delhi-based National Association of Software and Service Companies (Nasscom), India's major technology trade group, is designed to fix a problem in the developing country: a lack of centralized personal data.

In the U.S., employers can use so-called data brokers, including two that receotly reported security breaches — ChoicePoint Inc. and LexisNexis Group — to get background information on job candidates. But India doesn't have centralized, national databases. In fact, it wasn't until last year that a national credit-reporting agency, the Credit Information Bureau of India Ltd., was formed to gather data on Indian citizens.

Without access to that type of data, Subbu Venkataraman, a vice president at Sierra Atlantic Inc., a Fremont, Calif.-based provider of offshore IT services, depends on former employers and third-party firms to check the references of Indian job candidates.

Once someone applies for a job at a Sierra Atlantic Indian facility, the company checks his qualifications with previous employers, said Venkataraman in an interview from India. A third-party reference-checking firm is also used, and job candidates may be asked to provide paper documents, such as credit card bills and bank records, to help verify their credit histories, be said.

Sierra Atlantic's process is "an India solution for an India problem. It seems to be working fine," said Venkataraman.

Safeguards in Place

As envisioned, the Nasscom program would allow technology workers to voluntarily register in the database, said Nasscom Vice President Sunil Mehta. The registry will be administered by a third party that will hire a professional reference-checking company to cooduct background checks, be said.

Jeroeo Tas, vice chairman of Mphasis, said the theft of data from his firm may be the result of someone getting customers' phone numbers and calling them outside of Mphasis facilities to gain personal identification oumbers for account access. "Clearly, it is important that we keep reminding everybody that they shouldn't give out PINs," be said.

Mphasis doesn't allow its business process outsourcing employees to bring in any media that can be used to copy files, and calls are monitored, Tas said.

Background checks don't necessarily weed out problems, said Bruce Schneier, chief technology officer at Counterpane Internet Security Inc. in Mountain View, Calif. "Sure, they'll find known criminals," be said, "but they won't find people with no criminal records who might steal money when the opportunity arises."

Reference checks didn't turn up any problems with the arrested employees, Tas said.

It may be up to employers to sort out best practices in dealing with offshore firms. The Financial Services Technology Consortium was developing offshore standards over issues such as the handling of live data [QuickLink 42182]. But it dropped the project because member financial services firms worried that any best-practice book could be used by federal authorities to develop more-stringent regulations, said Jim Salters, director of technology initiatives for the FSTC. 53617

Continued from page 1

E-voting

count votes in five local elections, with a boiling point reached in a countywide March 8 special election.

The latest snafu — in which a glitch caused hundreds of votes to be uncounted, prompting the subsequent resignatioo of county elections supervisor Constance Kaplan — left Miami-Dade officials considering a possible switch to optical scanning equipment.

Officials said the miscount didn't influence the result of last month's election.

However, "if you talk to a number of people, they have lost confidence and are cynical about whether their votes count," said Miami-Dade County Mayor Carlos Alvarez. "That has to be changed. We need to do something where we can restore the confidence of the people in the electoral process. That boils down to the equipment. The equipment is problematic."

He also emphasized that "people want some sort of backup, a hard copy on paper," which is unavailable with the touch-screen machines.

With backing from Alvarez, County Manager George Burgess on April 4 issued a memorandum instructing newly appointed Supervisor of Elections Lester Sola to undertake a comprehensive review of the county's voting-related processes, including the way it manages system coding and staff training.

Burgess also urged Sola to "assess the desirability and feasibility of replacing the county's touch-screen electronic voting system with an optical scan system."

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SP2 Blocking Tool Expires on Windows XP

Deadline forces Automatic Updates users to do full Service Pack 2 install

BY JORIS EVERS

A special tool that blocks the download of Service Pack 2 on Windows XP PCs expired last week, ending an eight-month reprieve from SP2 for some users who rely on the Automatic Updates feature in Windows to keep their systems up to date.

Following the release of SP2 last August, Microsoft Corp. agreed to temporarily offer the blocking tool after hearing from Automatic Updates customers who weren't prepared to deal with the service pack.

Users could set a Windows registry key to instruct the system to skip the downloading and installation of SP2 but still download other critical updates.

The April 12 deadline — a 240-day extension — was established to give users adequate time to prepare for the mammoth update. SP2 is now delivered to all Automatic Updates users and is available at the Windows Update Web site.

"I am ready for XP SP2 now," said Thomas Smith, manager of desktop engineering at a large Houstoo-based company, which he declined to name. Smith had earlier blocked the SP2 download on the 5,000 PCs he manages. His firm began upgrading systems last month after finishing work on a complementary update that users will apply so they can keep accessing certain Web sites that SP2 blocks, he said.

Still, Smith isn't happy with the way Microsoft is "force-feeding" him the update. "I am glad that we were able to prepare for it, but next time, they need to have a good user roundtable to discuss this," he said. Smith said he expects the upgrade project to be 80% complete within a mooth.

SP2 is intended to better protect Windows XP users against hackers, viruses and other security risks. However, in the process, SP2 can render applications inoperable and block access to certain Web sites, which prompted many businesses to hold off on installing SP2 so they could take the time to test it with their systems.

Upgrade Obstacles

Compatibility issues are keeping Reed Smith LLP from immediately upgrading its 2,600 Windows XP machines. The Pittsburgh-based law firm plans to include SP2 in a refresh of its desktop software to be installed starting next year, said David Guilinger, a director in Reed Smith's systems and technology department.

"If we build from scratch, SP2 works fine with our software; if we apply it on top of our existing configurations, we have issues," Guilinger said. "Upgrading introduced too many end-user prompts and conflicts."

Microsoft advised consumers to enable Automatic Updates in Windows XP to patch their systems, but it recommended that businesses use patch management tools such as its Systems Management Server (SMS) and Software Update Services, or third-party products.

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QuickLink a5690
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The expiration of the blocking tool "affects only machines in a handful of enterprise customers' environments," said Tiffany Allesina, a group product manager at Microsoft, in a statement. Most customers that used the tool have either installed SP2 or now use special tools for patch management, she said.

Microsoft has labeled SP2 a "critical" update and noted that 185 millioo copies of SP2 have been downloaded to date.

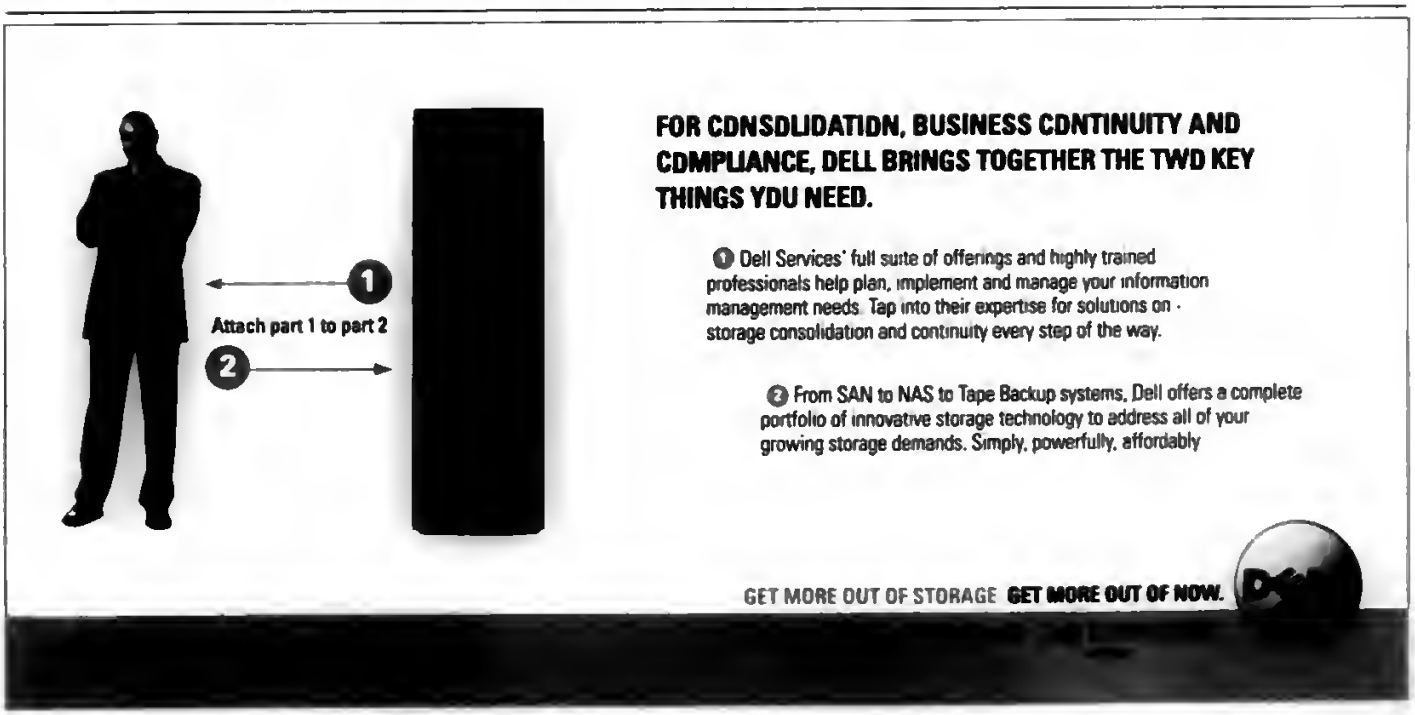
Adoption by enterprise customers is in line with Microsoft's expectations. In February, the company said 77% of about 800 enterprise customers surveyed in late 2004 planned to deploy SP2 sometime in mid-2005.

Holland & Knight LLP upgraded its 3,500 Windows XP clients to SP2 over a six-week period without any hiccups, said Travis Abrams, IT security and systems manager at the Lakeland, Fla.-based international law firm. Holland & Knight tested early releases of the service pack over several months, he said.

The upgrade, performed using Microsoft's SMS product, weot smoothly, Abrams said. The primary issues were related to Web sites, some of which had to be added to the list of trusted sites in the Internet Explorer Web browser.

Abrams advised his peers to upgrade as sooo as possible but test compatibility with business applications and Web sites first. 53782

Evers writes for the IDG News Service.



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8.15am to 8.30am	**Introduction and Overview** Julia King, Executive Editor, Events, Computerworld
8.30am to 9:15am	**The Next Wireless Evolution** Iain Gillott, Founder, iGillott Research
9:15am to 9:45am	**Sales Force Mobilization** Jeff Jones, System Project Leader, UnumProvident
9:45am to 10:15am	Refreshment and Networking Break
10:15am to 10:45am	**Keynote Presentation:** **Broadband Wireless Solutions for the Enterprise** Roger Gurnani, CIO, Verizon Wireless
10:45am to 11:15am	**End-User Case Study** Larry Singer, SVP, Strategic Insight Officer, Sun Microsystems
11:15am to Noon	**Panel Discussion: Real-World Wireless** Moderator: Julia King, Executive Editor, Events, Computerworld Panelists: Norm Fjedheim, SVP and CIO, Qualcomm David T. Phillips, Information Systems Manager, Foley, Inc. Jenkins Ravenel, Principal, Technology and Operations, Network Computing, Bank of America Joseph Ziskin, VP, Global Telecom Industry, IBM
Noon	Program Concludes

Selected speakers include:

Iain Gillott
Founder, iGillott Research

Roger Gurnani
CIO, Verizon Wireless

Norm Fjedheim
SVP and CIO, Qualcomm

Julia King
Executive Editor, Events, Computerworld

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Report Details Flaws in U.K. Case Management IT System

Officials say that improvements are coming slowly

BY LAURA ROHDE

A U.K. government report painted a decidedly difficult picture of the besieged Child Support Agency's (CSA) child-support case management and telephony system. That picture included accounts of stockpiled claims that were never entered into computer systems, files that were deleted for no clear reason and incorrect information that demoralized staff members intentionally entered in an effort to keep cases active.

Two years into its development, the problem-plagued, $863 million CSA system includes a key Java-based application developed by Electronic Data Systems Corp., as well as a telephone call center system from BT Group PLC's consulting and systems integration business.

The IT system, launched two years behind schedule in March 2003 and $484 million over budget, has been blamed for delaying payments to tens of thousands of single parents.

"Some innovative members of staff had attempted to find alternative solutions to the problems caused by the fragile IT system, in order to provide better service to clients. Staff were not always entirely sure how near they were to breaking rules," according to the report titled "Child Support Reform: The views and experiences of CSA staff and new clients."

Ongoing Effort

The Department for Work and Pensions (DWP), which oversees the CSA, commissioned the report from the Personal Finance Research Centre at the University of Bristol in England. Most of the staff interviews were conducted last April, according to a spokesman for the center. The report was submitted in September to the DWP, which published the paper on March 24.

> **"A number of new software releases have been made, and there has been significant improvement."**
>
> SPOKESMAN, U.K. DEPARTMENT FOR WORK AND PENSIONS

The DWP last week stressed that improvements have since been made to the system.

"The information in this report is quite old; a number of new software releases have been made, and there has been significant improvement," a DWP spokesman said.

EDS is still working with the DWP to get the system "satisfactorily functional," said Alan Johnson, the U.K.'s secretary of state for Work and Pensions, in a House of Commons Parliamentary Select Committee progress report last month. He also revealed that the DWP has withheld $25.2 million in payments to EDS over the past two years [QuickLink 53508].

Despite the recent progress, the CSA will likely delay the transfer of hundreds of thousands of cases from its old systems until next year, the report said. "We will not jeopardize cases where money is already flowing to children by moving them onto the new system until we are sure it is working properly," the DWP spokesman said.

Telling Interviews

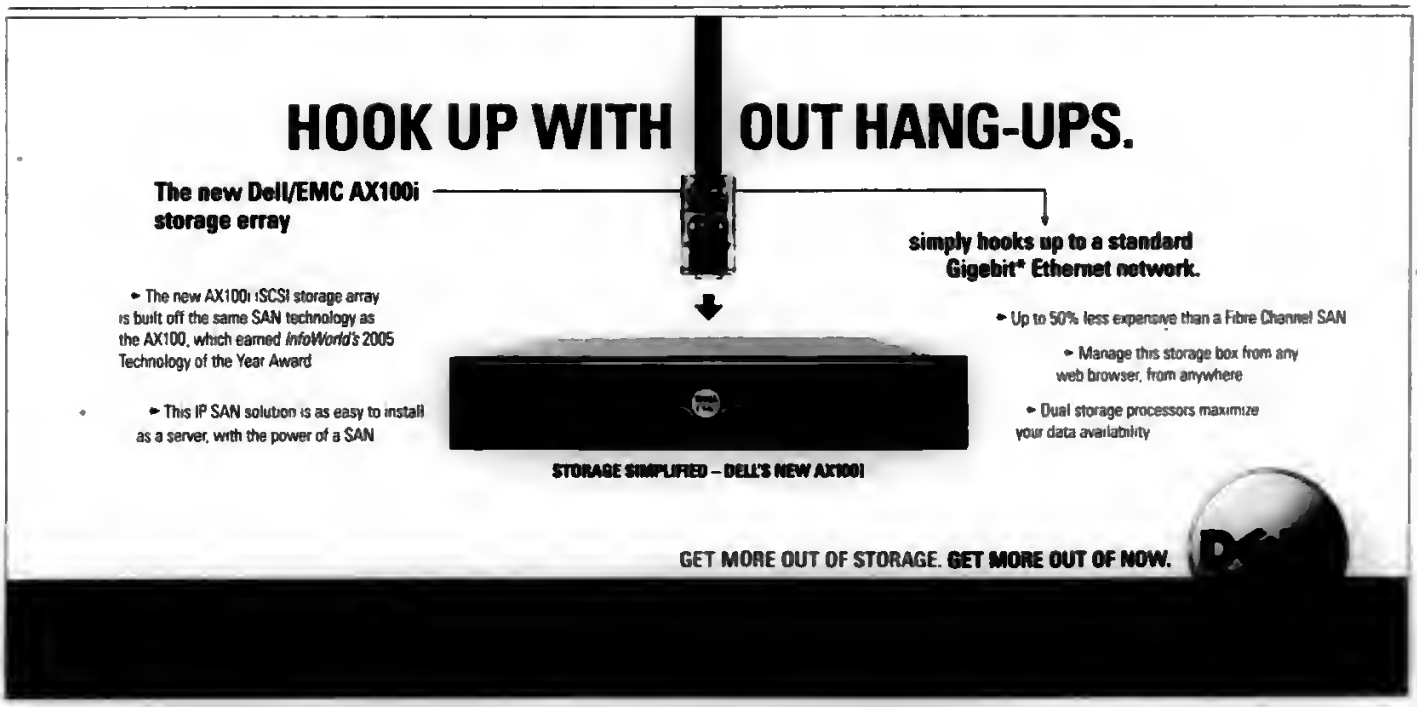
The report assessed not just the new IT system but also the entire overhaul of the CSA that was undertaken at the same time. It is based on interviews with 42 administrative officers and 12 executive-level staff members, as well as 58 clients. The CSA employs about 10,000 people.

Those interviewed criticized the design, speed and reliability of the system. Specific complaints included screens that took from 20 seconds to 10 minutes to refresh, the lack of a delete button for accidental errors and instances where staff were unable to send cases to the right office and therefore "simply deleted them," hoping that they were duplicated in the appropriate business unit.

The training process was also ineffective and inappropriate, according to the report. Rather than receiving training on the live system, a majority of the employees were given specially prepared computer training disks that contained only straightforward, problem-free, cases.

Despite being encouraged last year by the Select Committee to completely scrap the system, it appears that the DWP has decided to focus on fixing what it has, though the DWP was unable to say when the system is expected to be fully operational. **53777**

Rohde is a reporter for the IDG News Service.



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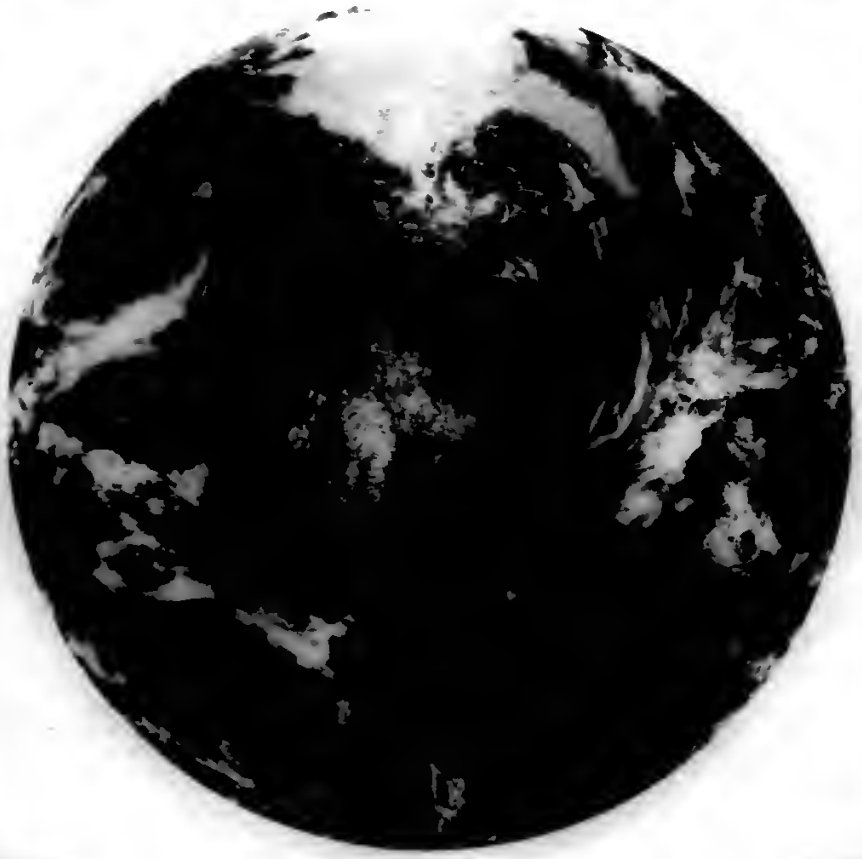

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DON TENNANT

Manifest Destiny

I HAD ABSOLUTELY NO INTENTION of writing about globalization again this week. I'm loath to belabor the issue, or perhaps more accurately, to further belabor it. Plus, there are a lot of important news stories in this week's issue that would be really cool to write about to hopefully spark some discussion in other areas.

But the "IT Inbreeding" column I wrote three weeks ago that caused such a commotion [QuickLink 53377] did a disservice that needs to be addressed promptly. It was a disservice not for the reasons that were articulated in all those readers' letters we printed in last week's issue [QuickLink 53571] and in the dozens of others we didn't have the space or permission to print, but for a reason that was articulated last week by, of all people, Mikhail Gorbachev.

In my column, I said companies that outsource work to rural locations in the U.S. as an alternative to offshore locations need to weigh the opportunity cost of not having that contact with non-U.S. cultures and markets. My broader point, and my reason for using the controversial "inbreeding" analogy, was that we benefit more from outside engagement than from insularity. But the point I failed to make, and hence the disservice, is this: We simply can't and must not be concerned solely with what benefits us in this country.

Speaking at a meeting of the Massachusetts Software Council in Boston, Gorbachev called on the IT sector and U.S. leaders to develop partnerships with other nations and to get over the fear of IT advances in other countries. Such partnerships will foster a "secure, just and democratic world order," Gorbachev said. "The [current] state of global chaos is not good for anybody."

He went on to appeal to the IT community to help narrow the gap between the rich and poor, which would in turn aid in creating a "new world order" that will be "more stable, more just and more humane." The premise is that as a rich nation, we have the obligation to help those who are less fortunate. Judging from the letters I've received, a whole lot of Americans just don't buy into that premise.

One of the hardest-hitting letters was from an IT professional and mom who said she was "saddened" by my column. "Of course, I was already sad," she said, "at the plight of my fellow IT professionals, many of whom will never work in this profession again, whose skills, intelligence, energy and expensive education and training have been flushed down the toilet by their own country." She said she'd been laid off in 2001, and it took her 10 months to find another job. "We fended off homelessness by the skin of our teeth," she said.

I, in turn, was saddened by her account, as anyone would be. It's simply unacceptable that she was put in that position. My problem is that I find it equally unacceptable for any mom anywhere to be put in that position. I'm simply unable to rationalize the notion that we as Americans should consider ourselves inherently more worthy of a decent livelihood simply by virtue of the fact that we had the incalculable good fortune of being born or otherwise gaining citizenship here.

If we have a manifest destiny, let it be to improve the lot of all mankind. No one has done more to achieve that end than U.S. technology professionals. Don't lose sight of that calling now. **53786**

Don Tennant

THORNTON A. MAY

Mainstream Can't See IT Individuality

ON A RECENT EPISODE of the comedy/drama *Boston Legal*, a senior partner asks the lithe and exotic female associate, Tara, if Denny Crane (who is played by William Shatner, better known to the IT community as Capt. Kirk from the space opera *Star Trek*) had at any time done something to objectify her. Tara replies, without malice or concern, and apparently quite pleased with the situation, that all men objectify her.

While Tara may find her objectification a vital, or at least nontoxic, part of her workplace identity, sociologists, anthropologists and most behavioral psychologists will tell you that it's bad to be thought of as an object. In being an object, you cease to be a person. You are presumed to possess traits that others associate with the class of objects you are labeled as belonging to.

Which brings us to the world of IT. A review of media treatments and communication patterns currently being done at the IT Leadership Academy indicates that most people outside our industry and virtually all media outlets objectify IT professionals. While objectification is thought to be a very good thing in the world of software development, when it comes to the evolution of our industry, our profession and your own career, it's a very bad thing. IT professionals are viewed as tech objects — "Fix my PC," "Make my e-mail work" — and frequently nothing more.

Every journalist, researcher and professor in this business has been asked by vendor CEOs and marketing chiefs, "So tell me, what are CIOs thinking these days?" Is this not objectification?

Of course, many professions suffer from this sort of thing. The financial world has Wall Street. Politicians have Main Street. Marketers have Madison Avenue. Stretching a bit, we could

claim that venture capitalists have Sand Hill Road. Though these thoroughfares do exist, they are used more as pathways of thought, fraught with meaning. As such, they are shorthand references to the compendium of understanding regarding s certain industry. There's no byway for IT as yet. But before we can create a road of our own (Rue du Tech?), we need to do a bit of surveying. The IT Leadership Academy's examination revealed that the mental processes of IT leaders are for the most part unmapped and poorly understood.

Teams of surveyors at the Berkeley CIO Institute and the CIO Solutions Gallery at the Fisher College of Business at Ohio State University will tell you that the IT community should be parsed on three dimensions at the very least: the size of the company, the quality of its IT shop and the vertical market it's in. Simply focusing on one dimension — say, vertical markets — isn't enough.

For example, if one were to compare the mental models and day-to-day business behaviors of Marv Adams st Ford, Ralph Szygenda at General Motors, Barbara Cooper at Toyota and Rich Hoffman at Hyundai, one would find fundamentally different approaches to creating value with IT.

I'm very fortunate to have met and become friends with many high-impact CIOs. Having spent s great deal of time with these individuals, I can state most emphatically that IT leaders are deliciously, demonstrably and dramatically *different*. Anyone who doesn't realize that is just plain nuts.

IT professionals are people worth knowing who deserve to be treated as the wonderful individuals they are. **53556**

JOHN PARKER

IT, Workers Can't Cling To the Past

I RECENTLY attended a meeting that stayed on my mind for quite a while. It's clear that as my company changes to meet the future, it creates uncertainty about IT jobs. This uncertainty makes career planning difficult for our technology professionals, and some frontline IT people had asked for help sorting it all out.

The meeting was still rattling around in my head when I received three magazines in the mail. One targeted CEOs, another CFOs, and the last one board members. This coincidence led to a quick look, which yielded some surprises. The IT-related content was remarkable. One-third of the CEO publication focused on outsourcing, networks, on-demand IT, storage, business intelligence technologies and, strangely, XML. The board magazine discussed recruiting CIOs for board membership and the merits of board-level IT committees. The CFO publicstion even discussed innovation through IT, instead of the usual cost-cutting.

I believe these publications are on target. IT is clearly on the minds of those who run our companies — in spite of the buzz a few months back thst IT is no longer an important arrow in a company's quiver — for three primary reasons:

1. Running s significant business without solid IT solutions is virtually inconceivable.

2. The Sarbanes-Oxley Act and other regulations increase the focus on corporate controls and financial operations and have significant IT implications.

3. Businesses are shifting from a cost focus toward value-building investments. Emphasis on innovation, growth and revenue generation is increasing, which will lead to important IT projects.

IT's importance is clear, but that doesn't make the technology alone strategic. Business personnel no longer use technology as s silver bullet, as some did during the Internet boom. They now see that IT tools are only as good as those wielding them, which puts the strategic premium on traditional elements such as corporate strategy, customer service, unique product offerings and execution.

What does this mean for IT shops?

Renewed focus on traditional business disciplines creates tremendous opportunities for IT shops. The key is establishing s collegial alignment with business personnel as strategies and objectives are developed. This insight can be used to develop a two-to-three-year technology implementation plan to support business activities and create value.

Those shops that play offense by aligning correctly, executing flawlessly, establishing the right mix of internal and third-party solutions, and investing wisely will thrive while accommodating the dynamic business environment we'll face for the foreseeable future. They will be seen as integral parts of their firms and valuable contributors to their success.

Those shops that play defense by clinging too tightly to historical approaches or that are too slow and inflexible to accommodate a fast-paced business environment will face an uncertain future.

What does it mean for IT people? Solid opportunity for those who are ready, and obsolescence for those who are not. Traditional jobs, like application development and systems support, will remain important to IT organizations, but there won't be as many of them because the use of third parties for traditional skills will continue. Leadership, financial and business disciplines, vendor governance, project management, systems integration, architecture and relationship management are among the skills that IT professionals will need in the future.

Those individuals who actively manage their careers to keep their skills sharp and relevant will experience tremendous opportunity for growth. Those who cling to past skills and job descriptions or who look to someone else to manage their careers will unfortunately struggle. **53735**

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READERS' LETTERS

Mac OS Can Learn From Windows

IN RECOUNTING a mid-'90s discussion with Bill Gates ["Apple: Here to Stay," QuickLink 52930], Don Tennant was skeptical about Gates' statement that "there's a ton of things even in Windows 3.1 that the Mac doesn't have, that someday they'll probably add to their system."

A couple of years after the release of Win 95, I attended an Apple event celebrating the new features in Mac OS 8.0. As I sat watching this operating system version that offered full-screen wallpaper (a feature of Win 3.1), internet options (catching up with Win 95), systemwide sound effects (another Win 3.1 feature) and more, I said to the longtime Mac user sitting beside me that this was Apple's attempt to maintain parity with Windows 95.

Clearly, Microsoft has gotten s lot of mileage out of features that appeared first in the Mac OS (as Gates begrudgingly admitted in Tennant's column). But it has by no means been a one-way street.

Alan Zisman
Computer teacher, Vancouver School District, Vancouver, British Columbia

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DON TENNANT

Manifest Destiny

I HAD ABSOLUTELY NO INTENTION of writing about globalization again this week. I'm loath to belabor the issue, or perhaps more accurately, to further belabor it. Plus, there are a lot of important news stories in this week's issue that would be really cool to write about to hopefully spark some discussion in other areas.

But the "IT Inbreeding" column I wrote three weeks ago that caused such a commotion [QuickLink 53377] did a disservice that needs to be addressed promptly. It was a disservice not for the reasons that were articulated in all those readers' letters we printed in last week's issue [QuickLink 53571] and in the dozens of others we didn't have the space or permission to print, but for a reason that was articulated last week by, of all people, Mikhail Gorbachev.

In my column, I said companies that outsource work to rural locations in the U.S. as an alternative to offshore locations need to weigh the opportunity cost of not having that contact with non-U.S. cultures and markets. My broader point, and my reason for using the controversial "inbreeding" analogy, was that we benefit more from outside engagement than from insularity. But the point I failed to make, and hence the disservice, is this: We simply can't and must not be concerned solely with what benefits us in this country.

Speaking at a meeting of the Massachusetts Software Council in Boston, Gorbachev called on the IT sector and U.S. leaders to develop partnerships with other nations and to get over the fear of IT advances in other countries. Such partnerships will foster a "secure, just and democratic world order," Gorbachev said. "The [current] state of global chaos is not good for anybody."

He went on to appeal to the IT community to help narrow the gap between the rich and poor, which would in turn aid in creating a "new world order" that will be "more stable, more just and more humane." The premise is that as a rich nation, we have the obligation to help those who are less fortunate. Judging from the letters I've received, a whole lot of Americans just don't buy into that premise.

One of the hardest-hitting letters was from an IT professional and mom who said she was "saddened" by my column. "Of course, I was already sad," she said, "at the plight of my fellow IT professionals, many of whom will never work in this profession again, whose skills, intelligence, energy and expensive education and training have been flushed down the toilet by their own country." She said she'd been laid off in 2001, and it took her 10 months to find another job. "We fended off homelessness by the skin of our teeth," she said.

I, in turn, was saddened by her account, as anyone would be. It's simply unacceptable that she was put in that position. My problem is that I find it equally unacceptable for any mom anywhere to be put in that position. I'm simply unable to rationalize the notion that we as Americans should consider ourselves inherently more worthy of a decent livelihood simply by virtue of the fact that we had the incalculable good fortune of being born or otherwise gaining citizenship here.

If we have a manifest destiny, let it be to improve the lot of all mankind. No one has done more to achieve that end than U.S. technology professionals. Don't lose sight of that calling now. **53786**

Don Tennant

THORNTON A. MAY

Mainstream Can't See IT Individuality

ON A RECENT EPISODE of the comedy/drama *Boston Legal*, a senior partner asks the lithe and exotic female associate, Tara, if Denny Crane (who is played by William Shatner, better known to the IT community as Capt. Kirk from the space opera *Star Trek*) had at any time done something to objectify her. Tara replies, without malice or concern, and apparently quite pleased with the situation, that all men objectify her.

While Tara may find her objectification a vital, or at least nontoxic, part of her workplace identity, sociologists, anthropologists and most behavioral psychologists will tell you that it's bad to be thought of as an object. In being an object, you cease to be a person. You are presumed to possess traits that others associate with the class of objects you are labeled as belonging to.

Which brings us to the world of IT. A review of media treatments and communication patterns currently being done at the IT Leadership Academy indicates that most people outside our industry and virtually all media outlets objectify IT professionals. While objectification is thought to be a very good thing in the world of software development, when it comes to the evolution of our industry, our profession and your own career, it's a very bad thing. IT professionals are viewed as tech objects — "Fix my PC," "Make my e-mail work" — and frequently nothing more.

Every journalist, researcher and professor in this business has been asked by vendor CEOs and marketing chiefs, "So tell me, what are CIOs thinking these days?" Is this not objectification?

Of course, many professions suffer from this sort of thing. The financial world has Wall Street. Politicians have Main Street. Marketers have Madison Avenue. Stretching a bit, we could

claim that venture capitalists have Sand Hill Road. Though these thoroughfares do exist, they are used more as pathways of thought, fraught with meaning. As such, they are shorthand references to the compendium of understanding regarding a certain industry. There's no byway for IT as yet. But before we can create a road of our own (Rue du Tech?), we need to do a bit of surveying. The IT Leadership Academy's examination revealed that the mental processes of IT leaders are for the most part unmapped and poorly understood.

Teams of surveyors at the Berkeley CIO Institute and the CIO Solutions Gallery at the Fisher College of Business at Ohio State University will tell you that the IT community should be parsed on three dimensions at the very least: the size of the company, the quality of its IT shop and the vertical market it's in. Simply focusing on one dimension — say, vertical markets — isn't enough.

For example, if one were to compare the mental models and day-to-day business behaviors of Marv Adams at Ford, Ralph Szygenda at General Motors, Barbara Cooper at Toyota and Rich Hoffman at Hyundai, one would find fundamentally different approaches to creating value with IT.

I'm very fortunate to have met and become friends with many high-impact CIOs. Having spent a great deal of time with these individuals, I can state most emphatically that IT leaders are deliciously, demonstrably and dramatically *different*. Anyone who doesn't realize that is just plain nuts.

IT professionals are people worth knowing who deserve to be treated as the wonderful individuals they are. **53556**

JOHN PARKER

IT, Workers Can't Cling To the Past

I RECENTLY attended a meeting that stayed on my mind for quite a while. It's clear that as my company changes to meet the future, it creates uncertainty about IT jobs. This uncertainty makes career planning difficult for our technology professionals, and some frontline IT people had asked for help sorting it all out.

The meeting was still rattling around in my head when I received three magazines in the mail. One targeted CEOs, another CFOs, and the last one board members. This coincidence led to a quick look, which yielded some surprises. The IT-related content was remarkable. One-third of the CFO publication focused on outsourcing, networks, on-demand IT, storage, business intelligence technologies and, strangely, XML. The board magazine discussed recruiting CIOs for board membership and the merits of board-level IT committees. The CFO publication even discussed innovation through IT, instead of the usual cost-cutting.

I believe these publications are on target. IT is clearly on the minds of those who run our companies — in spite of the buzz a few months back that IT is no longer an important arrow in a company's quiver — for three primary reasons:

1. Running a significant business without solid IT solutions is virtually inconceivable.

2. The Sarbanes-Oxley Act and other regulations increase the focus on corporate controls and financial operations and have significant IT implications.

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3. Businesses are shifting from a cost focus toward value-building investments. Emphasis on innovation, growth and revenue generation is increasing, which will lead to important IT projects.

IT's importance is clear, but that doesn't make the technology alone strategic. Business personnel no longer use technology as a silver bullet, as some did during the Internet boom. They now see that IT tools are only as good as those wielding them, which puts the strategic premium on traditional elements such as corporate strategy, customer service, unique product offerings and execution.

What does this mean for IT shops?

Renewed focus on traditional business disciplines creates tremendous opportunities for IT shops. The key is establishing a collegial alignment with business personnel as strategies and objectives are developed. This insight can be used to develop a two-to-three-year technology implementation plan to support business activities and create value.

Those shops that play offense by aligning correctly, executing flawlessly, establishing the right mix of internal and third-party solutions, and investing wisely will thrive while accommodating the dynamic business environment we'll face for the foreseeable future. They will be seen as integral parts of their firms and valuable contributors to their success.

Those shops that play defense by clinging too tightly to historical approaches or that are too slow and inflexible to accommodate a fast-paced business environment will face an uncertain future.

What does it mean for IT people? Solid opportunity for those who are ready, and obsolescence for those who are not. Traditional jobs, like application development and systems support, will remain important to IT organizations, but there won't be as many of them because the use of third parties for traditional skills will continue. Leadership, financial and business disciplines, vendor governance, project management, systems integration, architecture and relationship management are among the skills that IT professionals will need in the future.

Those individuals who actively manage their careers to keep their skills sharp and relevant will experience tremendous opportunity for growth. Those who cling to past skills and job descriptions or who look to someone else to manage their careers will unfortunately struggle. **53735**

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READERS' LETTERS

Mac OS Can Learn From Windows

IN RECOUNTING a mid-'90s discussion with Bill Gates ["Apple Here to Stay," QuickLink 52930], Don Tennant was skeptical about Gates' statement that "there's a ton of things even in Windows 3.1 that the Mac doesn't have, that someday they'll probably add to their system."

A couple of years after the release of Win 95, I attended an Apple event celebrating the new features in Mac OS 8.0. As I sat watching this operating system version that offered full-screen wallpaper (a feature of Win 3.1), Internet options (catching up with Win 95), systemwide sound effects (another Win 3.1 feature) and more, I said to the longtime Mac user sitting beside me that this was Apple's attempt to maintain parity with Windows 95.

Clearly, Microsoft has gotten a lot of mileage out of features that appeared first in the Mac OS (as Gates begrudgingly admitted in Tennant's column). But it has by no means been a one-way street.

Alan Zisman
Computer teacher, Vancouver School District, Vancouver, British Columbia

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SERVICES

BY 12:50 P.M. Central time on Feb. 28, Verizon Communications Inc. had already logged 1.7 million Web services transactions for tasks like looking up customer addresses and selling new services.

The New York-based telecommunications company averages about 2.5 million to 3 million Web services transactions a day, anchored by its mostly homegrown service-oriented architecture (SOA), a platform that was two and a half years in the making. Dubbed the IT Workbench, the SOA supports the design, deployment and management of Web services. It went operational early last year and has helped the company slash its IT budget by 50% by eliminating redundant systems inherited from the merger of Bell Atlantic and GTE, which spawned Verizon.

Verizon has also tackled some of the most vexing hurdles associated with Web services as part of the IT Workbench project, such as managing and securing the services, charging for reuse and monitoring the performance of service-enabled transactions.

IT WORKBENCH

The project was born in 2002 as executives began looking to reduce inefficiencies in software development, says Shadman Zafar, Verizon's senior vice president of architecture and services. Consolidating application development was key for Verizon, which found itself with multiple groups often duplicating efforts after the merger.

Executives focused on the 250 most-important business transactions the company performed, such as verifying customer credit histories and looking up customer information. On average, each transaction had been developed five to 25 times; one was deployed 45 different times, Zafar says. The duplication was draining developer productivity and created needless ongoing maintenance costs.

The company decided to use Web services to expose the application programming interfaces of common transactions as XML, which could be consumed by the Simple Object Access Protocol (SOAP) standard and used by multiple lines of business.

Zafar says he spent much of 2002 and 2003 evangelizing to developers about the potential benefits of Web

services — especially to the two "religious" camps of .Net and Java developers. Despite some initial resistance, these groups warmed to Web services once project leaders demonstrated that the standards could allow .Net developers to consume Web services-enabled Java applications and Java developers to use .Net Web services, Zafar says.

His efforts to promote the use of Web services were backed by Verizon's CIO, who included target metrics for Web services usage as performance measurements for company vice presidents. "Verizon took a very aggressive view of Web services," Zafar says. "We were not toying with it. We took it as a business metric, and we had to meet a very tough business metric."

Zafar set an initial target in 2004 of building 10 applications and 10 transactions on the IT Workbench as Web services. The company instead built 57 applications and 200 transactions. At the beginning of the year, Verizon was supporting 10,000 Web services transactions per day; by the end of 2004, the daily average had skyrocketed to 2.5 million to 3 million per day.

Anne Thomas Manes, an analyst at Burton Group in Midvale, Utah, says this number of transactions per day qualifies as one of the largest corporate deployments of Web services.

"Verizon appears to have embraced 'true' SOA," she says. "Their goal was to reduce redundancies by building shared reusable services. A few other companies have also embraced SOA, but most companies that I've worked with are still more focused on using Web services for integration as opposed to a real architecture of applications based on SOA design principles."

Now, Verizon is filing patents for some of the technology it built to anchor its use of Web services, and both BEA Systems Inc. and IBM have approached the company about licensing its homegrown platform so they can offer it as part of their application server software stacks, Zafar says.

INSTITUTIONALIZING WEB SERVICES

With the CIO's mandate in hand, Zafar's group in 2004 set about institutionalizing the use of Web services. After an initial test project to demonstrate that Web services would allow Verizon's billing and wholesale departments to pass a customer record between systems using SOAP, Zafar worked on a process to ensure that development projects would focus on Web services.

At the beginning of 2004, Verizon began funneling each development project for key business transactions through two groups. One ensured that new applications represented useful transactions that could be used by more than one group in the organization, and the other identified which transactions could be deployed as Web services. In addition, Zafar required all new development projects to get his approval before going into production.

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On the technology side, project managers began designing a framework to handle the cataloging, security and management of the Web services.

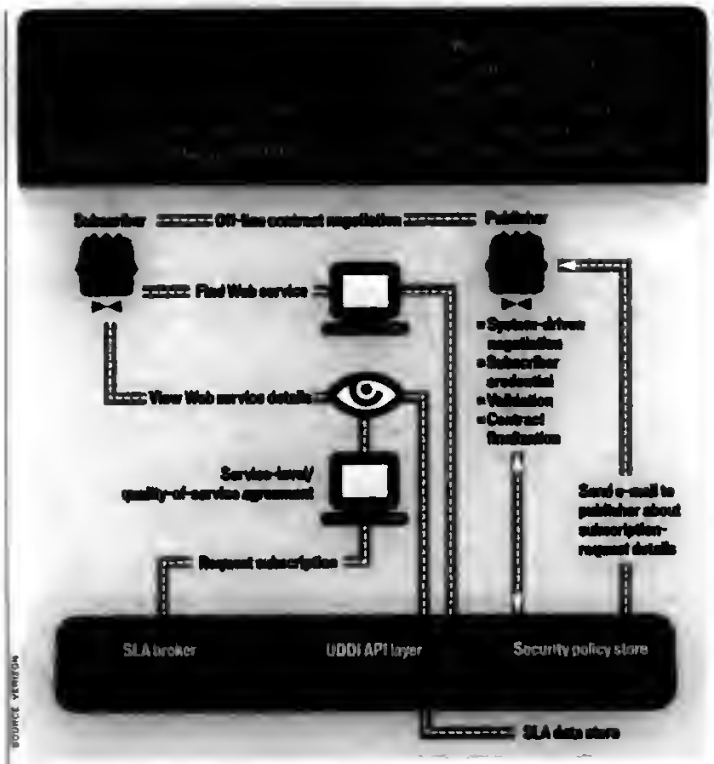
The top priority was making the framework easy to use, says Ruchir Rodrigues, Verizon's executive director of architecture and eServices. To keep maintenance costs low, Verizon chose a decentralized, agent-based approach to its SOA rather than a broker-based system where all service requests are handled by a server or set of servers, Rodrigues says. "We didn't want to get into the maintenance hassle of maintaining these servers with fail-over," he adds.

Verizon custom-developed agents or small code libraries that sit on all its application servers to intercept various pieces of information about the services, like usage, response time and IP address, as they flow back and forth. This information is put into a log file and shipped to the IT Workbench portal to be processed.

The agents support the subscription, management and dashboard layers of Verizon's SOA. The subscription layer allows developers to publish and consume Web services and to set up service-level agreements regarding their use of the services. By linking developers through the portal, Verizon supported its goal of making the use of Web services as nonintrusive as possible, Rodrigues says. "If I didn't have an IT Workbench platform and I wanted to use somebody else's Web service, I would have to call him," he says. "We wanted to start reducing that interaction and making it easier for people to get to the Web services."

IT Workbench project manager Mehul Shah, who helped design the management layer, says he relied on his experience designing network management systems. The agents sitting on the application servers act as "sniffers" to log different management data at the Web services endpoints, he says.

The third layer of the SOA is a dashboard application that allows Verizon to track Web services transaction volumes by line of business on a daily basis. IT has until recently used this information to tweak hardware resources to support load levels. However, early this year, Verizon IT management decided that because the system is now so big, the company will move responsibility for the operation of the IT Workbench to the data center, Rodrigues says.



SOURCE: VERIZON

MORE ON THE WORKBENCH

QuickLink 53718

QuickLink 53536

EXTERNAL INTEGRATION

The IT Workbench is focused on internal integration using Web services. For external integration with business partners, Verizon knew it wanted a hardware gateway to insulate its intranets from the outside world. But it struggled to find a vendor that could meet its performance demands — evoking a service in less than 10 milliseconds, according to Rodrigues.

Finally, Verizon tested a management gateway from Santa Monica, Calif.-based SOA Software Inc. (formerly Digital Evolution Inc.) that the company now uses for managing and securing Web services between Verizon and telemarketing partners to exchange customer data.

Verizon is moving deeper into the transactions used by each line of business and plans to support 33 million Web services transactions per year, says Zafar. But the SOA has already helped the company to break down many of the walls separating its 7,000 developers, he adds.

"This has almost become a virtual meeting place of developers," Zafar says. Developers talk a lot more across organizations because of the platform. "When they have questions," he says, "they will call another developer as opposed to developing something else." 53537

BRIEFS

OpTier Transaction Manager Ships

■ OpTier Inc. in New York has announced the availability of CoreFirst, an application for automatically preventing performance problems in real time and providing transaction-level visibility into multitier workloads in production, according to the company. CoreFirst is designed to ensure consistent, predictable performance for IT business services, giving organizations the ability to ensure service levels as well as optimize the resources of their IT infrastructure, says OpTier. Pricing starts at $100,000.

FineGround Delivers File Services App

■ FineGround Inc. in Campbell, Calif., has announced FineGround Velocity-FS, an appliance for the data center that's designed to help deliver high-performance file services over WANs. The product is installed in front of data center storage and file systems to optimize file service traffic for distribution over the WAN, and it's designed to preserve rights management and access control, security and other features, according to the company. Velocity-FS will be available in June, starting at $20,000.

AXS-One Upgrades Financial Manager

■ Rutherford, N.J.-based AXS-One Inc. has begun shipping Enterprise 9.0 - Compliance Edition, the latest version of its financial management system. The software, which runs on Windows, HP-UX, IBM's AIX and Sun's Solaris, includes integration with Crystal Reports, an XML user interface and enhanced cycle management products, such as budget, expense and purchase cycle management, the company says. A bundle of up to four component modules starts at $25,000 per module. The average upgrade price for existing customers is between $25,000 and $50,000.

ROBERT L. MITCHELL

Tag Teams Wrestle With Web Content

DESKTOP SEARCH TOOLS have done wonders in allowing me to gain control over information once it's on my desktop, but that begs the question: Does all of that stuff need to be there in the first place? If the source of the information is the Web, the answer may be no. A better way for information workers to accumulate and organize information is to leave it where they found it and provide a pointer or bookmark to that content.

Unfortunately, browser-based bookmarks can quickly become unwieldly to manage.

That's where social bookmarking Web sites such as Del.icio.us come in. These popular services combine one-click bookmarking of Web pages with an ad hoc tagging system. Users create their own keywords and short descriptions and associate them with each bookmark. They can then view their own Web site links, sort them by keyword and view the links of other participants who used those same terms.

These aggregations of Web content, created by like-minded individuals, can provide quick access to related information in the correct context — something that's more difficult for search engines to achieve. And because the bookmarks are on the Web rather than within a single instance of a browser, they can be accessed from any computer with an Internet connection.

The phenomenon of shared tagging of Web pages and other types of online content is spreading at a quickening pace. Del.icio.us, which launched in late 2003, was the first social bookmarking Web site. Today, users can choose from a variety of free services. These include Flickr, which lets users upload, tag and share photos online; Technorati, which lets users tag and track blog content; and Spid.ero.us, which summarizes tagging activities across multiple social bookmarking sites.

Enthusiasts see social bookmarking as a way to index the Web, but it could also become a powerful tool for enhancing the productivity of distinct groups, or communities, within an organization.

Today, the taxonomies that organizations create for categorizing content don't necessarily match the needs of every individual or group, aren't always well followed and must continually be kept up to date. They may provide the structure an organization needs for regulatory compliance purposes, but they don't always pass the "what's in it for me" test.

The process of adding tags that you don't buy into becomes a chore — one that many users dispense with quickly by choosing a default or the first keyword in a list that even remotely relates to the content.

While tools that automate the categorization process relieve users of the task of selecting tags from canned category lists, the keywords still aren't personalized; they're part of someone else's taxonomy. And if the user can't categorize content in a way that's consistent with the way he thinks about his job, he is unlikely to take full advantage of it to help him do that job better.

Social tagging creates an ad hoc taxonomy of sorts, although it lacks a formal structure or hierarchy. This "folksonomy" — a term coined to describe taxonomies created by regular folks rather than professionals — can't replace more formal structures needed in areas such as compliance management. But it could become a strong complement.

Enterprise portals and content management tools that enable social bookmarking of Web, intranet and other content, for example, could help groups within an organization become more efficient. These self-selecting sets of links, created and maintained by the communities that need them, could benefit everyone, from technical support to field sales.

Within tech support, for example, links to key technical data in supplier Web sites, blogs or discussion forums could organically establish themselves as users within the group find, categorize and rank page links. Participants could see and use the tags their peers have created or could create their own, in the process developing a group taxonomy that could be shared within a department or an organization, or with the world.

That prospect has vendors such as portal software firm Plumtree Software rushing to fit the concept of social tagging within their own products. And for organizations that can't wait and want to experiment with their own implementations, the De.lirio.us social bookmarking Web site (*http://de.lirio.us/rubric*) makes its Rubric engine and software templates available as open-source.

The use of social tagging techniques across the World Wide Web has established itself in a little more than a year. The technology may take longer to catch on in the enterprise, but for many users, it will be worth the wait. **53745**

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The top priority was making the framework easy to use, says Ruchir Rodrigues, Verizon's executive director of architecture and eServices. To keep maintenance costs low, Verizon chose a decentralized, agent-based approach to its SOA rather than a broker-based system where all service requests are handled by a server or set of servers, Rodrigues says. "We didn't want to get into the maintenance hassle of maintaining these servers with fail-over," he adds.

Verizon custom-developed agents or small code libraries that sit on all its application servers to intercept various pieces of information about the services, like usage, response time and IP address, as they flow back and forth. This information is put into a log file and shipped to the IT Workbench portal to be processed.

The agents support the subscription, management and dashboard layers of Verizon's SOA. The subscription layer allows developers to publish and consume Web services and to set up service-level agreements regarding their use of the services. By linking developers through the portal, Verizon supported its goal of making the use of Web services as nonintrusive as possible, Rodrigues says. "If I didn't have an IT Workbench platform and I wanted to use somebody else's Web service, I would have to call him," he says. "We wanted to start reducing that interaction and making it easier for people to get to the Web services."

IT Workbench project manager Mehul Shah, who helped design the management layer, says he relied on his experience designing network management systems. The agents sitting on the application servers act as "sniffers" to log different management data at the Web services endpoints, he says.

The third layer of the SOA is a dashboard application that allows Verizon to track Web services transaction volumes by line of business on a daily basis. IT has until recently used this information to tweak hardware resources to support load levels. However, early this year, Verizon IT management decided that because the system is now so big, the company will move responsibility for the operation of the IT Workbench to the data center, Rodrigues says.

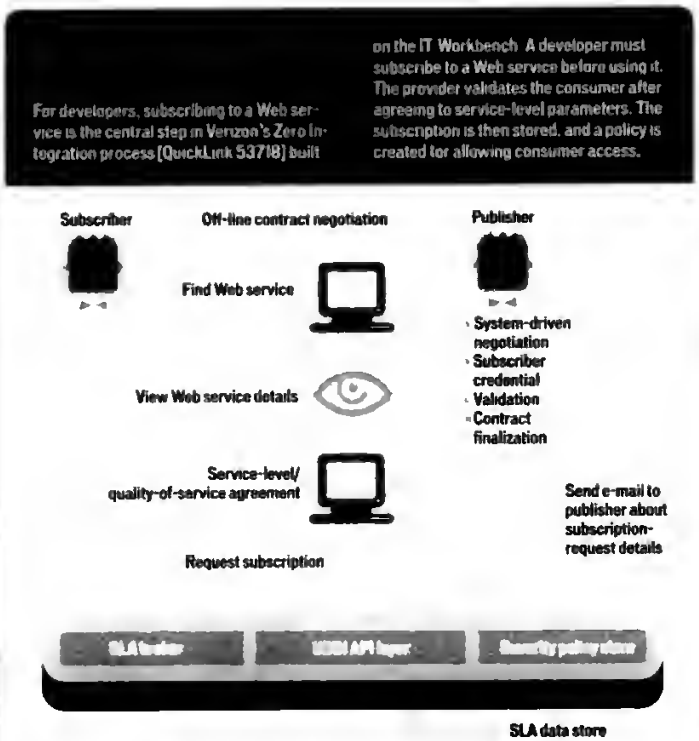
EXTERNAL INTEGRATION

The IT Workbench is focused on internal integration using Web services. For external integration with business partners, Verizon knew it wanted a hardware gateway to insulate its intranets from the outside world. But it struggled to find a vendor that could meet its performance demands — evoking a service in less than 10 milliseconds, according to Rodrigues.

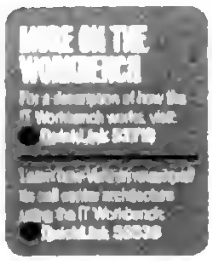
Finally, Verizon tested a management gateway from Saota Monica, Calif.-based SOA Software Inc. (formerly Digital Evolution Inc.) that the company now uses for managing and securing Web services between Verizon and telemarketing partners to exchange customer data.

Verizon is moving deeper into the transactions used by each line of business and plans to support 33 million Web services transactions per year, says Zafar. But the SOA has already helped the company to break down many of the walls separating its 7,000 developers, he adds.

"This has almost become a virtual meeting place of developers," Zafar says. Developers talk a lot more across organizations because of the platform. "When they have questions," he says, "they will call another developer as opposed to developing something else." **53537**



For developers, subscribing to a Web service is the central step in Verizon's Zero to Integration process (QuickLink 53718) built on the IT Workbench. A developer must subscribe to a Web service before using it. The provider validates the consumer after agreeing to service-level parameters. The subscription is then stored, and a policy is created for allowing consumer access.



BRIEFS

OpTier Transaction Manager Ships

■ OpTier Inc. in New York has announced the availability of CoreFirst, an application for automatically preventing performance problems in real time and providing transaction-level visibility into multitier workloads in production, according to the company. CoreFirst is designed to ensure consistent, predictable performance for IT business services, giving organizations the ability to ensure service levels as well as optimize the resources of their IT infrastructure, says OpTier. Pricing starts at $100,000.

FineGround Delivers File Services App

■ FineGround Inc. in Campbell, Calif., has announced FineGround Velocity-FS, an appliance for the data center that's designed to help deliver high-performance file services over WANs. The product is installed in front of data center storage and file systems to optimize file service traffic for distribution over the WAN, and it's designed to preserve rights management and access control, security and other features, according to the company. Velocity-FS will be available in June, starting at $20,000.

AXS-One Upgrades Financial Manager

■ Rutherford, N.J.-based AXS-One Inc. has begun shipping Enterprise 9.0 - Compliance Edition, the latest version of its financial management system. The software, which runs on Windows, HP-UX, IBM's AIX and Sun's Solaris, includes integration with Crystal Reports, an XML user interface and enhanced cycle management products, such as budget, expense and purchase cycle management, the company says. A bundle of up to four component modules starts at $25,000 per module. The average upgrade price for existing customers is between $25,000 and $50,000.

Tag Teams Wrestle With Web Content

DESKTOP SEARCH TOOLS have done wonders in allowing me to gain control over information once it's on my desktop, but that begs the question: Does all of that stuff need to be there in the first place? If the source of the information is the Web, the answer may be no. A better way for information workers to accumulate and organize information is to leave it where they found it and provide a pointer or bookmark to that content.

ROBERT L. MITCHELL is *Computerworld*'s senior features editor. Contact him at robert_mitchell@computerworld.com.

Unfortunately, browser-based bookmarks can quickly become unwieldly to manage.

That's where social bookmarking Web sites such as Del.icio.us come in. These popular services combine one-click bookmarking of Web pages with an ad hoc tagging system. Users create their own keywords and short descriptions and associate them with each bookmark. They can then view their own Web site links, sort them by keyword and view the links of other participants who used those same terms.

These aggregations of Web content, created by like-minded individuals, can provide quick access to related information in the correct context — something that's more difficult for search engines to achieve. And because the bookmarks are on the Web rather than within a single instance of a browser, they can be accessed from any computer with an Internet connection.

The phenomenon of shared tagging of Web pages and other types of online content is spreading at a quickening pace. Del.icio.us, which launched in late 2003, was the first social bookmarking Web site. Today, users can choose from a variety of free services. These include Flickr, which lets users upload, tag and share photos online; Technorati, which lets users tag and track blog content, and Spadefoot.us, which summarizes tagging activities across multiple social bookmarking sites.

Enthusiasts see social bookmarking as a way to index the Web, but it could also become a powerful tool for enhancing the productivity of distinct groups, or communities, within an organization.

Today, the taxonomies that organizations create for categorizing content don't necessarily match the needs of every individual or group, aren't always well followed and must continually be kept up to date. They may provide the structure an organization needs for regulatory compliance purposes, but they don't always pass the "what's in it for me" test.

The process of adding tags that you don't buy into becomes a chore — one that many users dispense with quickly by choosing a default or the first keyword in a list that even remotely relates to the content.

While tools that automate the categorization process relieve users of the task of selecting tags from canned category lists, the keywords still aren't personalized; they're part of someone else's taxonomy. And if the user can't categorize content in a way that's consistent with the way he thinks about his job, he is unlikely to take full advantage of it to help him do that job better.

Social tagging creates an ad hoc taxonomy of sorts, although it lacks a formal structure or hierarchy. This "folksonomy" — a term coined to describe taxonomies created by regular folks rather than professionals — can't replace more formal structures needed in areas such as compliance management. But it could become a strong complement.

Enterprise portals and content management tools that enable social bookmarking of Web, intranet and other content, for example, could help groups within an organization become more efficient. These self-selecting sets of links, created and maintained by the communities that need them, could benefit everyone, from technical support to field sales.

Within tech support, for example, links to key technical data in supplier Web sites, blogs or discussion forums could organically establish themselves as users within the group find, categorize and rank page links. Participants could see and use the tags their peers have created or could create their own, in the process developing a group taxonomy that could be shared within a department or an organization, or with the world.

That prospect has vendors such as portal software firm Plumtree Software rushing to fit the concept of social tagging within their own products. And for organizations that can't wait and want to experiment with their own implementations, the Del.icio.us social bookmarking Web site (*http://del.icio.us/rubric*) makes its Rubric engine and software templates available as open source.

The use of social tagging techniques across the World Wide Web has established itself in a little more than a year. The technology may take longer to catch on in the enterprise, but for many users, it will be worth the wait. **53745**

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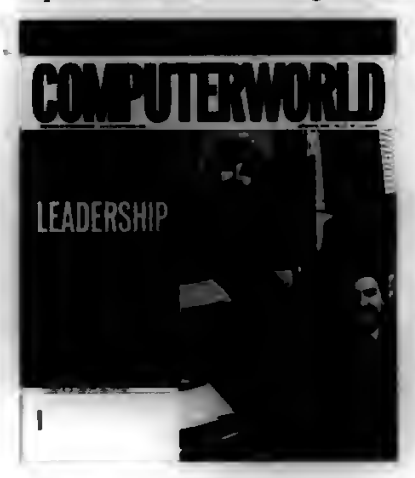
Don't Miss Your Chance!

COMPUTERWORLD 100 PREMIER IT LEADERS 2006

Nominate an outstanding IT leader for Computerworld's Premier 100 IT Leaders 2006 Awards program

EACH YEAR, *Computerworld* editors conduct a nationwide search for IT managers and executives who show technology leadership in their organizations. This prestigious awards program recognizes and honors IT professionals from a wide range of industries, drawing attention to the innovative, business-critical work they do.



ELIGIBLE NOMINEES include CIOs, CTOs, vice presidents, IT directors and managers from user companies, nonprofits, the computer industry and the public sector.

HONOREES will be announced in *Computerworld*'s Dec. 12, 2005, issue and will be our guests at the 7th Annual Premier 100 IT Leaders Conference, March 5-7, 2006, in Palm Desert, Calif.

Who Qualifies?

Deadline for Nominations Is May 31

Go online to nominate an IT leader at computerworld.com/p100nominations or QuickLink a3420.
Questions? Contact us by e-mail at premier100@computerworld.com.

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Conference At-a-Glance *(subject to change)*

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MONDAY, JUNE 13

10:00am – 8:00pm	Registration Open
Noon – 5:00pm	**Golf Outing**
1:30pm – 3:20pm	**Concurrent Industry Pipeline Sessions**
3:30pm – 5:00pm	**Technology Workshop**
7:00pm – 9:00pm	**Welcome Reception**

TUESDAY, JUNE 14

7:30am – 7:00pm	Registration Open
7:00am – 8:15am	Buffet Breakfast
8:15am – 9:00am	**Opening Visionary Presentation**
9:00am – 9:30am	**End User Case Study** Phiroz Darukhanavala, Chief Technology Officer, British Petroleum
9:30am – 10:00am	**End User Case Study**
10:00am – 10:15am	Break
10:15am – 10:45am	**Industry Leader Presentation**
10:45am – 11:15am	**End User Case Study** Andres Carvallo, Chief Information Officer, Austin Energy
11:15am – Noon	**Panel Discussion**
Noon – 1:30pm	Luncheon
1:30pm – 3:15pm	**General Sessions**
3:15pm – 3:45pm	**End User Case Study** Dale Frantz, Chief Information Officer, Auto Warehousing Company
3:45pm – 4:00pm	Break
4:00pm – 5:15 pm	**Concurrent End User Case Studies**
5:30pm – 8:00pm	**Solutions Showcase & Expo with Buffet Dinner**

WEDNESDAY, JUNE 15

7:30am – 6:00pm	Registration Open
7:00am – 8:15am	Buffet Breakfast
8:15am – Noon	**General Sessions**
8:15am – Noon	**End User Case Study** John Wade, Chief Information Officer, Saint Luke's Hospital
Noon – 1:30pm	**Solutions Showcase & Expo with Lunch**
1:30pm – 2:00pm	**End User Case Study**
2:00pm – 2:30pm	**End User Case Study** Ernest Park, Chief Information Officer, Maytag Corporation
2:30pm – 2:45pm	Break
2:45pm – 3:15pm	**End User Case Study**
3:15pm – 3:45pm	**End User Case Study** Ron Fijalkowksi, Chief Information Officer, Strategic Distribution Incorporated
3:45pm – 4:00pm	Break
4:00pm – 5:30pm	**Concurrent End User Case Studies**
5:30pm – 8:00pm	**Pre-Gala Reception, "Best Practices" Awards Ceremony, and Gala Evening with Dinner**

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CIO
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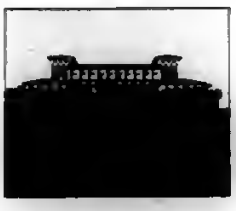
The Pre-Conference Golf Outing at the Kierland Golf Club located adjacent to the Westin Kierland Resort, is complimentary ($125 value) for registered IT End-Users (other participants, including sponsors and vendors, may play on an "as available" basis and are responsible for all applicable golf outing expenses).

For details contact Chris Johnson at 1-508-820-8652



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Your business card is REQUIRED to process your application

Questions? Call 1-800-883-9090

If not indicated on your business card, please provide the following required information

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All dollar amounts are in U.S. funds, registrations include full access to all sessions, the Expo, meals and receptions. Transportation and hotel accommodations are your responsibility. Computerworld reserves the right to limit and/or refuse any registration for any reason.

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Your Business/Industry
- ❑ Aerospace
- ❑ Manufacturing & Process Industries (non-computer related)
- ❑ Finance/Banking/Accounting
- ❑ Insurance/Real Estate/Legal Sevices
- ❑ Government: Federal (including Military)
- ❑ Government: State or Local
- ❑ Health/Medical/Dental Services
- ❑ Retailer/Wholesaler/Distributor (non-computer related)
- ❑ Transportation/Utilities
- ❑ Communication Carriers (ISP, Telecom, Data Comm, TV/Cable)
- ❑ Construction/Architecture/Engineering
- ❑ Data Processing Services
- ❑ Education
- ❑ Agriculture/Forestry/Fisheries
- ❑ Mining/Oil/Gas
- ❑ Travel/Hospitality/Recreation/Entertainment
- ❑ Publishing/Broadcast/Advertising/Public Relations/Marketing
- ❑ Research/Development Lab
- ❑ Business Services/Consultant (non-computer related)
- ❑ Manufacturing of Computers, Communications, Peripheral Equipment or Software

Your Job Title/Function:

IT MANAGEMENT
- ❑ CIO, CTO, CSO
- ❑ Executive VP, Senior VP
- ❑ Vice President
- ❑ Director
- ❑ Manager/Other IT Manager
- ❑ Supervisor

BUSINESS MANAGEMENT
- ❑ CEO, COO, Chairman, President
- ❑ CFO, Controller, Treasurer
- ❑ Executive VP, Senior VP, VP General Manager
- ❑ Director, Manager
- ❑ Other Corporate/Business Manager
- ❑ Other

Number of employees in your entire organization (ALL locations)
- ❑ 20,000 or more
- ❑ 10,000 - 19,999
- ❑ 5,000 - 9,999
- ❑ 1,000 - 4,999
- ❑ 500 - 999
- ❑ 100 - 499
- ❑ Less than 100

What is the estimated annual revenue of your entire organization?
- ❑ Over $10 Billion
- ❑ $1 Billion - $9.9 Billion
- ❑ $500 Million - $999 Million
- ❑ $100 Million - $499 Million
- ❑ Less than $100 Million

What is your organization's annual IT/IS budget for all IT/IS products?
- ❑ $1 Billion or more
- ❑ $500 Million - $999.9 Million
- ❑ $100 Million - $499.9 Million
- ❑ $50 Million - $99.9 Million
- ❑ $10 Million - $49.9 Million
- ❑ $1 Million - $9.9 Million
- ❑ $500,000 - $999,999
- ❑ $250,000 - $499,999
- ❑ $100,000 - $249,999
- ❑ Less than $100,000
- ❑ None

The one item that best describes your involvement in the IT purchase process
- ❑ Authorize/approve purchase
- ❑ Evaluate/recommend products, brands, vendors
- ❑ Specify features/technical requirements
- ❑ Set budget for expenditures
- ❑ Determine need to purchase
- ❑ Create IT strategy
- ❑ All of the above

What is your organization's most mission critical Mobile/Wireless development/implementation project this year?
- ❑ Deploying Wireless Mobility in the Enterprise
- ❑ Transforming the "Brick and Mortar" Enterprise
- ❑ Business Evolution through Mobilizing Field Workers
- ❑ Managing Cellular Mobile Data
- ❑ Securing Wireless LANs

What is your organization's most mission critical OVERALL development/implementation project this year?
- ❑ Business Intelligence/BPM/Customer Analytics
- ❑ Data Management
- ❑ Mobile & Wireless
- ❑ Enterprise Infrastructure/Data Center Buildout/Consolidation
- ❑ Network Infrastructure/Storage
- ❑ Security
- ❑ Application Development and Integration (Web Services/EAI)
- ❑ Compliance

Would you like to receive information about playing in the golf outing on Monday, June 13th?
- ❑ Yes
- ❑ No

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- ❑ Yes (please visit www.etcentral.com to reserve)
- ❑ No

Would you like to receive a complimentary subscription to Computerworld?
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- ❑ I already receive a subscription addressed to me personally
- ❑ No

Special services required?
- ❑ Yes (please attach a written description)
- ❑ No

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The eight original participants in the March SIM roundtable on women in IT

WHAT IT Women WANT

A virtual roundtable of high achievers talks about what today's women bring to IT and what they expect in return.

Q&A *Last month, a panel of highly successful businesswomen met in Morristown, N.J., to discuss the current environment for women in IT and its effect on recruiting, retention and women's careers. The forum was sponsored by the New Jersey chapter of the Society for Information Management, and it drew one of the biggest crowds in that chapter's history. Seven of the participants agreed to meet again, virtually, with* **Computerworld's** *Kathleen Melymuka.*

As we enter the 21st century, what's new about the problems of women in IT?

WEAVER: Now that IT is evolving to focus on information technology as an enabler of business, it's becoming more conducive to women's being able to embrace IT and excel. Now it's about understanding the business and delivering technology to help enable and grow the business versus "Here's the next new box to deploy."

SCITES: IT used to be so much of an individual contributor world, but that world is changing. Every operation is a team operation. There are multiple disciplines for IT and many ways in which women can succeed. But the fundamental issue for women is that very few are going into IT.

WALK: By 2012, computer professionals will be 11% of the total work population in the U.S. By 2031, we will have a 35 million-person labor shortage. In 2030, women in management and professional occupations will be 54% of the workplace. We'll have a huge need to develop women in all professional groups.

Of everything that was said at the SIM panel, what surprised you the most?

SCITES: That we were having this discussion in 2005. I've been involved for 30 years as a female leader, and the fact that we needed as an organization to do this just speaks volumes. The good part is it was wildly successful, so obviously, we touched a nerve.

Do IT organizations "get" women?

WALK: No. It's still a good-old-boy network. Women have a hard time being heard in the technical arena. If they have ideas, they're not accepted very quickly. If they want to talk about a better way of solving a problem, they're shut down.

SHAND: One of the big problems is they don't ask what they need to do to attract women. If I get a call from a client and there's a crisis, but the next call is the nurse at my child's school, am I going to hop on a plane and fly to Chicago or get in the car and drive to the school? Many women would choose to go to the child. If society wants women to make that choice, how do we handle that in terms of our need to excel in our careers? That's why lots of women are opting out.

CULP: Computer science is the only profession where the numbers of women have gone down.

GALIETTI: I've worked in lots of different environments. There's this sense of surrounding yourself with people like you, and sometimes you just don't think women will be like you.

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DALIETTI: I've worked in lots of different environments. There's this sense of surrounding yourself with people like you, and sometimes you just don't think women will be like you.

THE Panel

Dorie Culp

Nancy Galiettl

Barbara Koster

Jan Scites

Kim Shand

Mary Anne Walk

Sylvia Weaver

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BARBARA GOMOLSKI, a former *Computerworld* reporter, is a vice president at Gartner Inc., where she focuses on IT financial management. Contact her at [redacted]

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[redacted]

COMPUTERWORLD

2005 Career Planning GUIDE

A handbook to help IT workers plan their next moves, at three career stages.

MY OWN career plan is called "stumbling forward." I just walk through career doors that, through pure luck, happen to open at the right time. It's worked OK for me, but it won't work in the challenging world of IT, where up-to-date technical and business skills are so important and job loss from outsourcing is a constant threat. You need a real plan.

So *Computerworld* is offering its first guide for IT professionals at different phases of their careers. We took this approach because the challenges and strategies are very different depending on whether you're just getting started in IT, stalled out at midcareer or moving toward semiretirement.

In this special report, you'll also get Johanna Rothman's step-by-step plan for taking charge of your IT career, plus tips on how to avoid common employee blunders.

I've been collecting career tips myself over the years, and here are a few of my favorites:

- If you want to get promoted, do the things that people one level up tend to do.
- Be better prepared at meetings than anyone else.
- Never, ever wear a Hawaiian shirt at a business function.

53534

Mitch Betts is Computerworld's *executive editor. You can contact him at mitch_betts@computerworld.com*

BYRON JOHNSON

Recent CIS graduate STEVE KEARNS won't just settle for the first job offered to him.

JENNIE ZEIGER

SEAN JAMESON realizes business knowledge is essential to taking the next step in his career.

SCOTT INDERMAUR

JOHN WADE is close to retirement age but shows no signs of cutting back his hours.

2005 Career Planning GUIDE

Getting Started

New to IT? Here's what it takes to land a job. By Mary K. Pratt

STEVE KEARNS won't settle for any old job, even in this tight market.

"It's more important for me to find a job that would be a good fit in the long term than to just get a job," he says.

Kearns' determination goes against the long-held philosophy of taking anything just to get a foot in the door. But if that notion was once true, IT leaders and career experts recommend against it now. Rather, they say, take the approach of job hunters like Kearns: Research companies, target particular positions, and contact potentially helpful people.

Kearns graduated in January with a bachelor's degree in computer information systems from Bentley College in Waltham, Mass. Like other new entrants into the high-tech workforce, he has witnessed several years of dramatic changes in the IT field. Tight budgets, outsourcing, offshoring, globalization and corporate mergers mean young technologists must work harder than ever to land their first jobs.

"Competition is global, and it's not a matter of 'I know the technology, and therefore I'm an ideal candidate,' " says Alesia Benedict, executive director of Rezamaze.com LLC in Rochelle Park, N.J. Job candidates from all over the world often compete for the same positions, while offshoring and outsourcing are putting some IT positions miles away from corporate offices. Companies today have their pick of people.

"Candidates really need to learn how to set themselves apart," Benedict adds. "And I think everyone has something that sets them apart. It's just a matter of uncovering it."

Kearns, who's pursuing a master's degree in IT at Bentley while looking for a job, says his work experience makes him stand out from other recent grads. He highlights his high school internship with a tech company, his college job at a pharmaceutical company and his overseas experience working at the Dublin office of Fidelity Investments.

Tech workers who have business experience are in the highest demand today, experts say. And those who can demonstrate that they understand how technology advances a company's business strategy leave the best impression.

Head for Business

Scot Klimke, CIO at Network Appliance Inc. in Sunnyvale, Calif., says he looks for candidates with internships or project experience where they used technology to solve business problems. He also looks for candidates with dual degrees, such as studies in computer science and business.

"It's about having a strong résumé that reflects having very strong experience," he says.

Klimke oversees about 160 full-time IT staffers as well as another 200 or so contractors. He has been adding 15 to 18 new employees every quarter. Klimke hires recent college grads following the winter and spring commencements, and he puts them through a yearlong apprenticeship that exposes them to several IT areas, such as data center management and systems administration.

Overall, though, Klimke says candi-

dates who are switching to IT from another career sometimes have an advantage because they already have that real-world work experience under their belts. Candidates coming from finance or marketing backgrounds are particularly desirable — as long as they've acquired the necessary tech skills.

Tech people, though, often don't have that business know-how.

"There's a tendency for people to focus on being just technicians," says Kurt Hahlbeck, partner in charge of business development and growth at Wipfli LLP, a consulting firm in Wausau, Wis.

That means most new entrants to the IT field need to be realistic and start at the bottom. Entry-level positions today range from help desk specialist and desktop support analyst to software engineer and programmer, and from IT associate and network engineer to project manager and IT consultant. Salaries range from about $45,000 for help desk and technical support specialists to about $52,000 for network administrators and $64,000 for programmer/analysts.

Don't Settle

But even as the economy improves, finding those entry-level positions remains a challenge, says Steven Rothberg, president of CollegeRecruiter.com, a Minneapolis-based career site. For their part, candidates still need to be thoughtful about their choices.

"If it's a choice between finding a job or no job for an extended period of time, it's better to find a job," he says. "But I think too many people settle. They're willing to be hired by the wrong company for the wrong work."

Rothberg says job seekers need to reach out to employers. They need to register at career sites and their college career offices. More important, they need to network. That means talking to everyone they know, calling everyone their parents know and contacting the people they recommend.

"IT candidates tend to be introverts, so it's much more difficult for them to network. But they've got to learn," says Rothberg.

Curt Pederson, vice provost and CIO of Oregon State University and the Oregon University System, says he knows firsthand the importance of networking: He's 58 and has never applied for job. His half-dozen professional posts have come about because he was recommended by people be knows.

"The ones who succeed are the ones who build relationships, work on teams, provide good service," be says. "The failures don't come because of lack of technical skills. They come because of lack of personal skills."

Pederson has a staff of 200 professionals supplemented by 200 student workers. Newcomers start as IT consultants, providing desktop, LAN and application support. Entry-level workers seem to like the title and the corresponding duties because they have responsibility and variety, Pederson says.

Drive and Desire

Good networking skills might get you an interview, but that doesn't guarantee an offer. Candidates still must demonstrate why they're the best person for the job.

Jerry Bartlett, vice president of application development at Ameritrade Holding Corp. in Omaha, says he looks for candidates with a well-rounded education, practical experience and a business-related background. He also wants to see an inquisitive attitude.

"What we're looking for is a desire to understand the bigger picture," Bartlett says, adding that be looks for those who demonstrate initiative, a strong intellect and a healthy curiosity.

"Anyone can develop what it takes to move ahead if they're willing to be introspective — truly introspective — to consider what they bring to the table and how they can contribute and if they then have the commitment to make changes there if necessary," be says.

Bartlett says be hired a developer who had less than a year's experience — and even paid for his relocation from North Carolina — because company officials were so impressed with his tech skills, business savvy and "his enthusiasm to be at Ameritrade."

"He has become such a leader," Bartlett adds.

Although that worker is a standout, Bartlett says he tries to have about 20% of his 400-person IT group in the junior ranks. Newcomers also participate in a mentoring program during their first year. "Our commitment is to ensure their success," he says.

New entrants also need to consider what paths they want to take as they advance, industry experts advise. Looking broadly, they can either advance to high-level technologist positions or move into IT management.

Regardless of the career path, tech executives, career coaches and recruiters agree that individuals must continually improve themselves if they want to advance.

"It is paramount that all candidates take responsibility for their futures," Benedict says. Get involved, ask questions, volunteer for projects. And put your own time and money into additional training "to be ever on the bleeding edge of what's out there," she says.

Martha Rogers built her blossoming IT career entirely by her own initiative. Rogers has a bachelor's degree in psychology and a master's of education degree in counseling. But she liked working with technology and picked up Web design as a hobby. She took an HTML class eight years ago, read a lot of technology books and joined technology-oriented groups.

That's why, after a decade working in social services, she easily moved into her current job as IT coordinator at PACE Inc., a nonprofit community action program in New Bedford, Mass.

And Rogers hasn't stopped learning. She's studying for A+ certification from the Computing Technology Industry Association, and she planned to attend the March conference of the Nonprofit Technology Enterprise Network.

Attitudes like that, experts say, will keep tech workers employed for years.

"You can't be lazy if you want to be in IT. You can't be done with school if you want to be in IT," says Tracy Laswell Williams, president of Arvada, Colo.-based Biz-Magic Inc., which operates the Career-Magic.com Web site. "You need to be seen as versatile and willing to do anything." 53025

Pratt is a Computerworld contributing writer in Waltham, Mass. You can contact her at marykpratt@verizon.net.

Tips

Even in this economy, landing the perfect IT position can be more than a pipe dream, experts say, as long as candidates work hard on their job searches and follow important guidelines like these:

- **Research companies and positions to ensure the right fit for you,** says Susan D. Strayer, founder of University and Career Decisions, a career management firm in Washington. Then tailor your résumé each time you apply, highlighting what's most applicable.
- **Don't rely too heavily on online searching.** Tracy Laswell Williams, president of Biz-Magic, worked with an unemployed programmer who repeatedly applied online for a position that was perfect for him. After getting no response, he called the company and learned that officials there had been unable to pull information off their résumé database. He was hired within weeks of his call.
- **Keep notes when networking,** so you can update contacts about your job search and career, says Steven Rothberg, president of CollegeRecruiter.com, "because it's likely in a few years you'll be looking again."

– Mary K. Pratt

ADVICE FOR IT NEWBIES

Visit our Web site for dozens of tips from career experts designed to help you get a foot in the door.

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dates who are switching to IT from another career sometimes have an advantage because they already have that real-world work experience under their belts. Candidates coming from finance or marketing backgrounds are particularly desirable — as long as they've acquired the necessary tech skills.

Tech people, though, often don't have that business know-how.

"There's a tendency for people to focus on being just technicians," says Kurt Hahlbeck, partner in charge of business development and growth at Wipfli LLP, a consulting firm in Wausau, Wis.

That means most new entrants to the IT field need to be realistic and start at the bottom. Entry-level positions today range from help desk specialist and desktop support analyst to software engineer and programmer, and from IT associate and network engineer to project manager and IT consultant. Salaries range from about $45,000 for help desk and technical support specialists to about $52,000 for network administrators and $64,000 for programmer/analysts.

Don't Settle

But even as the economy improves, finding those entry-level positions remains a challenge, says Steven Rothberg, president of CollegeRecruiter.com, a Minneapolis-based career site. For their part, candidates still need to be thoughtful about their choices.

"If it's a choice between finding a job or no job for an extended period of time, it's better to find a job," he says. "But I think too many people settle. They're willing to be hired by the wrong company for the wrong work."

Tips

Even in this economy, landing the perfect IT position can be more than a pipe dream, experts say, as long as candidates work hard on their job searches and follow important guidelines like these:

- **Research companies and positions to ensure the right fit for you,** says Susan D. Strayer, founder of University and Career Decisions, a career management firm in Washington. Then tailor your résumé each time you apply, highlighting what's most applicable.
- **Don't rely too heavily on online searching,** Tracy Laswell Williams, president of Biz-Magic, worked with an unemployed programmer who repeatedly applied online for a position that was posted for him. After getting no response, he called the company and learned that officials there had been unable to pull information off their resume database. He was hired within weeks of his call.
- **Keep notes when networking,** so you can update contacts about your job search and career, says Steven Rothberg, president of CollegeRecruiter.com, "because it's likely in a few years you'll be looking again."

Mary K. Pratt

Rothberg says job seekers need to reach out to employers. They need to register at career sites and their college career offices. More important they need to network. That means talking to everyone they know, calling everyone their parents know and contacting the people they recommend.

"IT candidates tend to be introverts, so it's much more difficult for them to network. But they've got to learn," says Rothberg.

Curt Pederson, vice provost and CIO of Oregon State University and the Oregon University System, says he knows firsthand the importance of networking: He's 58 and has never applied for job. His half-dozen professional posts have come about because he was recommended by people he knows.

"The ones who succeed are the ones who build relationships, work on teams, provide good service," he says. "The failures don't come because of lack of technical skills. They come because of lack of personal skills."

Pederson has a staff of 200 professionals supplemented by 200 student workers. Newcomers start as IT consultants, providing desktop, LAN and application support. Entry-level workers seem to like the title and the corresponding duties because they have responsibility and variety, Pederson says.

Drive and Desire

Good networking skills might get you an interview, but that doesn't guarantee an offer. Candidates still must demonstrate why they're the best person for the job.

Jerry Bartlett, vice president of application development at Ameritrade Holding Corp. in Omaha, says he looks for candidates with a well-rounded education, practical experience and a business-related background. He also wants to see an inquisitive attitude.

"What we're looking for is a desire to understand the bigger picture," Bartlett says, adding that he looks for those who demonstrate initiative, a strong intellect and a healthy curiosity.

"Anyone can develop what it takes to move ahead if they're willing to be introspective — truly introspective — to consider what they bring to the table and how they can contribute and if they then have the commitment to make changes there if necessary," he says.

Bartlett says he hired a developer who had less than a year's experience — and even paid for his relocation from North Carolina — because company officials were so impressed with his tech skills, business savvy and "his enthusiasm to be at Ameritrade."

"He has become such a leader," Bartlett adds.

Although th[illegible] Bartlett says he [illegible] of his 400 person IT [illegible] more links. Newcomers also participate in a mentoring program during their first year. "Our commitment is to ensure their success," he says.

New entrants also need to consider what paths they want to take, as they advance, industry experts advise. Looking broadly, they can either advance to high-level technologist positions or move into IT management.

Regardless of the career path, tech executives, career coaches and recruiters agree that individuals must continually improve themselves if they want to advance.

"It is paramount that all candidates take responsibility for their futures," Benedict says. Get involved, ask questions, volunteer for projects. And put your own time and money into additional training "to be ever on the bleeding edge of what's out there," she says.

Martha Rogers built her blossoming IT career entirely by her own initiative. Rogers has a bachelor's degree in psychology and a master's of education degree in counseling. But she liked working with technology and picked up Web design as a hobby. She took an ITTME class eight years ago, read a lot of technology books and joined technology-oriented groups.

That's why, after a decade working in social services, she easily moved into her current job as IT coordinator at PACE Inc., a nonprofit community action program in New Bedford, Mass.

And Rogers hasn't stopped learning. She's studying for A+ certification from the Computing Technology Industry Association, and she planned to attend the March conference of the Nonprofit Technology Enterprise Network.

Attitudes like that, experts say, will keep tech workers employed for years.

"You can't be lazy if you want to be in IT. You can't be done with school if you want to be in IT," says Tracy Laswell Williams, president of Arvada, Colo.-based Biz-Magic Inc., which operates the Career-Magic.com Web site. "You need to be seen as versatile and willing to do anything." **53025**

Pratt is a Computerworld contributing writer in Waltham, Mass. You can contact her at marykpratt@verizon.net.

Drawn to IT

[illegible]

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JENNIE ZEINER

Midcareer Kickers

It's time to re-energize your career with fresh skills.

By Thomas Hoffman

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LIKE OTHER IT MANAGERS, Sean Jameson is at a turning point in his career. He knows that he has to take the right steps to get to the next level — whether that means an internal promotion or a positioo with another organization.

"I think the closer you get to the boardroom, the more you have to understand about business units," says Jameson, chief information technology officer at New York University's School of Continuing and Professional Studies. He says he has been able to rise through the ranks in IT over the past 12 years largely on the strength of his technical skills.

But at the midpoint in his IT career, Jameson is forcing himself to he considerably more business-focused. He talks frequently to managers in business units throughout the university to better understand the challenges they face in their departments and develop IT strategies aimed at helping them meet their goals.

He's also thinking about pursuing an MBA — which would he free if he enrolls at NYU — to help him build on his business skills and advance his career should he decide to move into more of a corporate setting at some point. "It's a tough decision," he says.

Many other IT managers and technicians who have spent 10 to 20 years working in IT also find themselves facing difficult choices as they try to carve out new opportunities.

"Keeping your skills up to date is probably the biggest challenge that both technicians and IT managers face at this point in their careers," says Arnold Testa, CIO at Electric Power Research Institute Inc. (EPRI), an independent, nonprofit center for electricity and environmental research in Palo Alto, Calif.

Testa's advice to IT workers at midcareer who are seeking advancement: Show that you're excited about your work, demonstrate a willingness to he trained in new technologies or business skills, "and grow the technical leadership you've attained in the first

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>
> **MARIA SCHAFER,** ANALYST, GARTNER INC

part of your career," he says. That could include transitioning from being a reliable technician to being an IT project manager, says Testa, who oversees a 50-person IT staff.

Stuck in Neutral

But many technical workers are unwilling to learn new skills, and that's a big stumbling block for them if they want to move their careers forward — much less survive — in today's globally competitive labor market, says Martin Bean, chief operations officer at New Horizons Computer Learning Center Inc. in Anaheim, Calif.

"We can't think about job security. We have to think about career security and keep developing ourselves and moving ahead," advises Bean.

"People who are at the midpoint in their careers need to have more cross-training in different technologies and skill sets, both to attract themselves to other employers and to protect themselves against downsizing," adds Rick Stockfield, CEO of Talenthire.com, an Atlanta-based job-placement service.

But some IT professionals, like Alan Mastin, an IT project leader at Colomer USA, a Jacksonville, Fla.-based haircare product maker, work for companies with razor-thin training budgets and thus have limited educational opportunities.

Mastin, a 24-year IT veteran who spends most of his time developing Cobol programs, works in a 15-person IT shop where there are few opportunities for advancement and very little turnover. "Somebody has to die before a position becomes open," he says.

Mastin and his co-workers face other challenges. Colomer is transitioning to an SAP enterprise resource planning system over the next year, and the IT staffers have been told they will be retrained as business analysts. "I'll give it a shot and see what it's like," says Mastin, 53.

Some IT professionals who do have access to technical training say they simply don't have the time to take classes. For instance, Philadelphia-based Quaker Valley Foods Inc. moved in January from a 63,000-square-foot facility to a building that's four times bigger. The eight-month effort, which included installing telecommunications equipment and wiring, turned out to be very time-consuming, says Leo Romero, a network administrator there.

"It's a massive job when you're just a three-person department," he says.

IT workers at midcourse face other obstacles as they look to the future. Most technicians are uncomfortable

about sharing their career plans with their supervisors, but it's critical for them to do so, says Nextel Communications Inc. CIO Dick Lefave.

"It's important for people to take the time out to lay out what they want to do and where they want to go," he says. Their supervisors can then help to plot a path and determine the skills they'll need to acquire to get there, Lefave says.

"You have to realize that you can't be waiting for your boss to present you with opportunities — you have to be the No. 1 advocate for yourself," says Maria Schafer, an analyst at Gartner Inc. "Managers are too busy with too many direct reports to devote that time to you."

Look First, Leap Later

Some IT managers, such as Todd Larson, director of application development at Boston-based Eaton Vance Corp., are torn about their career advancement options. "If I want to attain CIO status, I would probably have to leave this company, and I don't want to have to do that — and my boss doesn't want me to either," he says.

It's a difficult position that many midcareer IT workers find themselves in. One of the mistakes people should avoid is taking a job at another company if you think you've gone as far as you can with your existing employer, says EPRI's Testa. "I think the mistake is to leap before you look."

Larson, a 15-year IT professional, believes that external forces such as globalization will have the greatest impact on his career choices. "We're following a strategy today of not using offshore labor. But we might not have a choice someday — it might become too cost-effective," he says.

One way to stay a step ahead of outsourcing is to demonstrate a willingness to learn new skills in order to remain marketable, says Schafer. That might mean abandoning a purely technical job and stepping into more of a customer-facing role, she adds.

It's also important for technicians and IT managers alike at midcareer to recognize their weaknesses and broaden their skills, says Lefave. Last year, he attended a three-month advanced management program at Harvard University, paid for by his company, to help him expand his strategic and financial know-how.

"It exposed me to a variety of executives from different companies, not just IT executives, but CFOs and COOs," says Lefave. Such programs "help balance your acumen as a business person." **53563**

Pitfalls

At midcareer, your biggest career challenge might be overcoming your own complacency. Here are some fresh tips for giving your career a jump-start and avoiding the mistakes that could derail you.

- **Tell your boss what your career goals are – before sharing them with a headhunter.** And if you don't have a mentor, get one now.
- **If you've become an expert in a specific discipline, such as network management, chances are you've become so valuable to senior management that they're not inclined to promote you.** Push to broaden your experience by, say, becoming part of a project team outside of your domain. Continue to demonstrate excellence, and communicate your value.
- **Talk to business managers in your organization regularly to stay in tune with their needs.** And volunteer for new assignments to show your interest in tackling the latest challenges.
- **Watch the people who are directly above you on the career ladder.** If they don't have your best interests in mind, they might use you as a springboard to further elevate themselves.
- **Take advantage of any educational opportunities available to you,** including training classes, technical seminars and business courses at two- and four-year schools.
- **And finally,** don't jump ship just for the sake of changing jobs.

– *Thomas Hoffman*

MIDCOURSE JUMP-START

This advice from top career experts can boost your overall outlook, as well as your career prospects.

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Most technicians are uncomfortable about sharing their career plans with their supervisors, but it's critical for them to do so, says Nextel Communications Inc.'s CIO Dick Lehr.

It's important for people to take the time out to lay out what they want to do and where they want to go," he says. Then supervisors can then help to plot a path and determine the skills they'll need to acquire to get there, Lehr says.

"You have to realize that you can't be waiting for your boss to present you with opportunities – you have to be the No. 1 advocate for yourself," says Maria Schafer, an analyst at Gartner Inc. "Managers are too busy with too many direct reports to devote that time to you."

Look First, Leap Later

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Larson, a 15-year IT professional, believes that external hires [illegible] organization will have the edge [illegible] in-class career choices. "We're [illegible] strategy to retain and nurture talent. But we might not have a choice [illegible] somebody [illegible] might [illegible] effective," he says.

One way to stay [illegible] scouting is to demonstrate [illegible] business to learn new skills [illegible] to remain marketable, says Schafer. This might mean abandoning a perfectly good job and stepping into a [illegible] customer facing role, she said.

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It exposed me to [illegible] views from different companies [illegible] and IT executives [illegible] CIOs, says Lehr. Such [illegible] help balance [illegible] business person. **53583**

Eye on Business

Even though Michael Barone, 42, [illegible] worked in several areas of [illegible] the past [illegible] years, he's never [illegible] the insurance industry. Where he worked 11 years at a [illegible] family-owned business.

Since joining Keane in 2000, Barone has held a variety of positions, including business analyst, project manager and engagement manager.

To gain the business-focused experience he needs, Barone is pursuing a master's degree at Boston College and has been attending monthly meetings at a local health care consortium for the past year.

MICHAEL BARONE

Pitfalls

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Thomas Hoffman

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SCOTT HUTCHISON

Nearing Retirement

No slacking off in career building for the 60-and-older crowd. By Mary Brandel

AT 63, JOHN WADE is working harder than he has ever worked in his career or in his 12 years as CIO at Saint Luke's Health System in Kansas City, Mo. If it's midnight and he's toiling at his home computer, he's more likely catching up on the latest in electronic patient record technology than booking a retirement cruise.

Wade plans to retire in two or three years, at which point he might resurrect Wade & Associates, a consulting firm he started before coming to Saint Luke's. But that seems a distant goal now, when he's working "enormous hours" supporting Saint Luke's Malcolm Baldrige National Quality Award efforts, acting as CIO and serving on the board of the Health Information and Management Systems Society (HIMSS).

Wade isn't the only one among his peers who is within retirement range but still burning the midnight oil. For a range of reasons — from a passion for the initiatives that technology can support, to concern about remaining technology-proficient and industry-savvy, to simply wanting to remain employed — many IT near-retirees often don't go gentle into their well-earned respite.

"Never did I think I'd work this hard at age 63," Wade says, noting that when he first started in IT, eight years was the typical technology-refresh cycle. Today, it's three to six months. "You have to keep up, and you don't do that between 8 a.m. and 7 p.m. — you're doing it at 12 at night," he says.

Anyone who has survived the ups and downs of a long career in IT knows there's no such thing as resting on your laurels in this industry, and the preretirement years are no different.

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"It's important to keep growing," says Tom DeMarco, a consultant at Cutter Consortium in Arlington, Mass. "As we learned from the 1990s and again in the downturn in 2004, corporations have no particular loyalty, even to people on the brink of retirement.

"If I were an employee in that stage of my career, I'd want to learn and get certified" in growing technologies such as J2EE and .Net, DeMarco says. "The key to end-of-career planning is to not treat it like the end of your career."

Pioneer Retirees

What makes retirement planning particularly interesting for people in IT is the lack of role models. "We're really only now getting the first substantial generation of IT workers coming to retirement age," points out Paul Glen, a *Computerworld* columnist and president of C2 Consulting in Los Angeles.

Glen says one trend for people approaching the last 10 years of their IT careers is to work part time or go into consulting or contracting. To do this, Glen says, they first need to figure out what sort of value they want to add to an organization — be it technical, man-

agerial or advisory. "I see a lot of CIOs who go into the consulting ranks, writing disaster recovery strategies or being coaches to other CIOs," he says. Even among lower-level managers, Glen sees a burgeoning field of IT management coaches. "They're saying, 'I've been there, and I'd rather help others than do this again,' " he says.

Second, the groundwork must be laid. "You need to determine what approach you want to take. If you want to get known publicly, you need to write some articles or a book or speak for some Project Management Institute events," Glen says.

William McQuiston, CIO at Truman Medical Centers Inc. in Kansas City, Mo., smiles at the idea of scaling back in his preretirement years. In two and a half years, when he reaches 62, he pictures himself golfing and "drowning worms off a fishing pole" after a 43-year stint in IT. But even though he plans in the next month or so to shift into a role as internal adviser to the CEO while also grooming his successor, he still doesn't know if "less hectic" is possible.

For the remainder of his time at Truman, McQuiston will manage a couple of CEO-driven projects that call for strong leadership and the ability to work across organizational boundaries. While not IT projects per se, accomplishing those goals will involve smart cards, Web self-service, contact management, call center technology and other "technology gizmos," McQuiston points out. So is this less hectic? "This stuff continues to change at breakneck speed — there's no escaping that," he says. So while preretirement may not mean less intensity for McQuiston, it will afford him a new view. "It's a change in what I do day to day, and that has a lot of appeal," he says.

Bright Future

Not all near-retirees in IT have fishing on their minds; in fact, many plan to continue working on a project or consulting basis after they retire. And the market looks good for this crowd. "We're failing to attract our share of young people in the IT industry," says DeMarco, adding that in some companies, the average age for IT workers is 50. "If you'd like to stay employed or do consulting after 65, that's likely to happen."

It's important, though, to do the necessary networking while you're still employed full time. For instance, Wade isn't positive that he'll consult after retiring, but being active with the HIMSS certainly won't hurt if he does.

Even if you just want to stay active in technology, perhaps on a volunteer basis, it's smart to look into possibilities while you're still employed, says Harriet Wasserman, associate dean and director of IT services at Seattle Central Community College. "A common pitfall is for people to not think about what they're going to do next," she says. "They say, 'I'm going to write a book, consult, play with my grandkids.' But you need things that are more concrete than that."

After 22 years at the college, Wasserman plans to retire in two years and says she knows "I don't want to sit at home and knit." Consulting is one option, but Wasserman is also considering community technology efforts. She has served for four years on the city of Seattle's board to advise its IT department on things like school computer labs and community technology centers. "It sounded cool, but I didn't know from afar how it worked. It was good to be right in the middle of it," she says.

Particularly for people who are high up in the food chain or who have worked many years at one company, succession planning is a big concern. And as McQuiston and Wade have found, the handoff and grooming period can help with the transition into postretirement mode.

But therein lie plenty of cautionary tales. "There are a lot of organizations that would say, 'This person is 62 or 63, and he's been grooming the next guy for six months — we could save a big salary if we let that CIO go now,' " Wade says. But he notes that he's not concerned about that happening at Saint Luke's, given its leadership's ethical commitment.

Some advise against loudly announcing your retirement plans. "You don't want to telegraph that you're mentally somewhere in between," Glen says.

And there are plenty of other potholes to avoid at this stage. "People in the last third of their career can become inflexible about issues and harden their stances about things," says John Challenger, president of Challenger, Grey & Christmas Inc., an outplacement consulting firm in Chicago. "They may fail to change as new regimes come in, or not grow with the technology."

These pitfalls are especially acute because the repercussions of making a mistake are huge. After all, there's no ducking the presence of age bias — an emotionally and politically charged subject, but one that near-retirees readily mention.

"IT as an industry is still very focused on the young," Glen says. And Wade agrees that "it's not as easy to get a job at the age of 50 as at the age of 30." He recalls arriving for a job interview at a small printing company in Burlington, Mass., 13 years ago and hearing from the president of the firm, " 'Oh, hi, John — you sound so much younger on the phone.' I knew right then, I didn't have a shot in hell at getting the job," he says.

The experience seems near-universal. "People tend to think you're dead," Wasserman says. "You talk about some cool new thing like voice over IP, and people say out of the blue, 'So, when are you going to retire?' " However, Wasserman plans to take training courses in C#, a new administration system and NetWare 6.5. "You have to embrace and love change, and if you don't, you're in the wrong field," she says. "But there are people who don't expect you to do that."

Which is why an awful lot of near-retirees won't be found in a rocking chair anytime soon. "I'll work to my last day," McQuiston says. "I want to give them my full measure — plus it will make the time go faster." **53030**

Brandel is a Computerworld contributing writer in Grand Rapids, Mich. Contact her at mary.brandel@comcast.net.

Pitfalls

IT professionals planning for retirement are breaking new ground as the first generation of tech retirees. Career experts identify some of the pitfalls for the preretirement crowd.

- **Not recognizing that you're at a new stage of your career.** "What made you successful in the past may not in the future and may actually be a detriment," says C2 Consulting's Paul Glen. For instance, if you were renowned as a good project manager, it's a mistake to reproduce what you did on previous projects rather than plan new projects differently.
- **Being "retired in place."** If your retirement date is coming up, it might be tempting to slow down or have too strong a sense of entitlement. "If you're backing off, it will be noticed right away," says William McQuiston, CIO at Truman Medical Centers. "Unless there's been a salary adjustment, there's no legitimate reason to do that."
- **Always a coach; never the coached.** "As you get older, it becomes important to coach people, but it's also important to accept some coaching as well," says Cutter Consortium consultant Tom DeMarco. People are more comfortable accepting counsel if they feel you will also accept it from them.
- **Moving into certain career tracks.** If you're not a manager and are late in your career, project management is not a great career choice, DeMarco says. "Nobody's going to invest in you as with a younger worker," he says. If you're still a technical worker at the age of 50, says DeMarco, there's no reason to switch to a managerial job, since most companies reward techies as well as managers.

– Mary Brandel

TIPS FOR NEAR-RETIREES

Ready to scale back but not retire completely? Read dozens of tips from career experts to help you plan

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After 22 years at the college, Wasserman plans to retire in two years and says she knows "I don't want to sit at home and knit." Consulting is one option, but Wasserman is also considering community technology efforts. She has served for four years on the city of Seattle's board to advise its IT department on things like school computer labs and community technology centers. "It sounded cool, but I didn't know from afar how it worked. It was good to be right in the middle of it," she says.

Particularly for people who are high up in the food chain or who have worked many years at one company, succession planning is a big concern. And as McQuiston and Wade have found, the handoff and grooming period can help with the transition into postretirement mode.

But therein lie plenty of cautionary tales. "There are a lot of organizations that would say, 'This person is 62 or 63, and he's been grooming the next guy for six months — we could save a big salary if we let that IT go now,'" Wade says. But he notes that he's not concerned about that happening at Saint Luke's, given its leadership's ethical commitment.

Some advise against loudly announcing your retirement plans. "You don't want to telegraph that you're mentally somewhere in between," Glen says.

And there are plenty of other pot holes to avoid at this stage. "People in the last third of their career can become inflexible about issues and harden their stances about things," says John Challenger, president of Challenger, Grey & Christmas Inc., an outplacement consulting firm in Chicago. "They may fail to change as new regimes come in, or not grow with the technology."

These pitfalls are especially acute because the repercussions of making a mistake are huge. After all, there's no ducking the presence of age bias — an emotionally and politically charged subject, but one that near-retirees readily mention.

"IT as an industry is still very focused on the young," Glen says. And Wade agrees that "it's not as easy to get a job at the age of 50 as at the age of 30." He recalls arriving for a job interview at a small printing company in Burlington, Mass., 13 years ago and hearing from the president of the firm, " 'Oh, hi, John — you sound so much younger on the phone.' I knew right then, I didn't have a shot in hell at getting the job," he says.

The experience seems near-universal. "People tend to think you're dead," Wasserman says. "You talk about some cool new thing like voice over IP, and people say out of the blue, 'So, when are you going to retire?' " However, Wasserman plans to take training courses in C#, a new administration system and NetWare 6.5. "You have to embrace and love change, and if you don't, you're in the wrong field," she says. "But there are people who don't expect you to do that."

Which is why an awful lot of near-retirees won't be found in a rocking chair anytime soon. "I'll work to my last day," McQuiston says. "I want to give them my full measure — plus it will make the time go faster." **53030**

Brandel is a Computerworld contributing writer in Grand Rapids, Mich. Contact her at mary.brandel@comcast.net.

Pitfalls

IT professionals planning for retirement are breaking new ground as the first generation of tech retirees. Career experts identify some of the pitfalls for the preretirement crowd.

- **Not recognizing that you're at a new stage of your career.** "What made you successful in the past may not in the future and may actually be a detriment," says C2 Consulting's Paul Glen. For instance, if you were renowned as a good project manager, it's a mistake to reproduce what you did on previous projects rather than plan new projects differently.
- **Being "retired in place."** If your retirement date is coming up, it might be tempting to slow down or have too strong a sense of entitlement. "If you're backing off, it will be noticed right away," says William McQuiston, CIO at Truman Medical Centers. "Unless there's been a salary adjustment, there's no legitimate reason to do that."
- **Always a coach, never the coached.** "As you get older, it becomes important to coach people, but it's also important to accept some coaching as well," says Cutter Consortium consultant Tom DeMarco. People are more comfortable accepting counsel if they feel you will also accept it from them.
- **Moving into certain career tracks.** If you're not a manager and are late in your career, project management is not a great career choice, DeMarco says. "Nobody's going to invest in you as with a younger worker," he says. If you're still a technical worker at the age of 50, says DeMarco, there's no reason to switch to a managerial job, since most companies reward techies as well as managers.

Mary Brandel

Golden Years

MIKE TAYLOR

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TIPS FOR NEAR-RETIREES

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These common career missteps can be avoided. Here's what experts say you should watch out for as you navigate through your career.

GEORGIA ADAMSON, founder, A Successful Career/Adept Business Services, Campbell, Calif.

■ **Tunnel vision** – in other words, restricting your business relationships primarily to colleagues in your technology career niche. As an IT professional, you should actively develop ties with nontechnical people as well as with your peers. You stand to benefit – and really can't lose by broadening your outlook.

■ **Living in the past.** You absolutely must present yourself to employers as having up-to-date skills and a zestful enthusiasm for cutting-edge technology. If you haven't brushed up your knowledge recently, think seriously about taking specialized classes in key areas of interest.

ALICE SNELL, vice president, iLogos Research Inc., San Francisco

■ **Blanketing your résumé** out there just because you can and sitting back to see what happens rather than engaging with companies through their career portals.

■ **Hiding your assets.** The IT world has become more project-based, so not providing details of your project experience on a résumé can make a long-term position look stagnant to a potential employer.

KATHERINE SPENCER LEE, executive director, Robert Half Technology, Menlo Park, Calif.

■ **Forgetting about "soft" skills.** While stellar technical abilities remain imperative, the demand for professionals with effective communication skills and strong knowledge of business fundamentals is increasing. When considering professional development opportunities, don't overlook chances to improve your business writing, public speaking and other soft skills.

■ **Not taking risks.** Not applying for a job because you fear rejection is a far worse late than submitting a résumé and being shot down. Calculated risk-taking is a hallmark of success. **53343**

MORE MISTAKES

Find other common career derailers, and tips for avoiding them, on our Web site.

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JOHANNA ROTHMAN

Getting Ahead

I WAS TALKING TO A RELATIVELY young developer the other day, and I asked him about his career plans. "Oh, I don't do career planning myself," he said. "I wait until my manager talks to me."

Oops. While it's true that some managers are interested in and want to coach you through your career planning, in my experience, even the few managers who know how to help employees plan their careers don't always take the time to do so. Face it: Your career is your responsibility. Here's how to start planning it right.

Your technical skills can be organized into four buckets: functional skills, domain expertise, tools/technology and industry expertise.

Functional skills are the skills you learned in school or have learned from books. How to develop, design, test, write, manage, schedule — all of those are functional skills. Domain expertise comes in two flavors: problem-space and solution-space. Problem-space domain expertise is how quickly and how well you understand the problems your product is trying to solve. Solution-space is how well you understand the internals of the product — how well the product solves the problem.

Tools and technology expertise includes all the languages, operating systems and other tools you know. Tools and technology expertise is the easiest to acquire. Industry expertise is how well you know the industry you're in.

Of these four areas of technical skill, your breadth in functional skills and your ability to acquire in-depth domain expertise are the two most valuable. It's easy for people to learn about new tools and technology, but it's how they apply their functional skills to the technology that predicts success. It's easy for people to learn about an industry, but it's how they use their industry knowledge to develop, test or manage a product that matters.

Focus on functional skills early. At the beginning of my technical career, I focused on my functional skills: how to be a better designer, debugger, unit tester, coder, overall software developer. When I transitioned into testing, I refocused on my functional testing skills: how to be a better tester. When I moved into management, I again refocused on my functional skills, this time in management: how to give feedback, how to coach, how to plan. Early in your career (and anytime you change roles), say, for the first five to 10 years, you learn new functional skills and new tools and technology.

Increase domain expertise midcareer. Once you've been working 10 to 12 years, it's critical to continue learning about how to adapt your functional skills to new domains and tools/technology. Otherwise, you become like someone I met recently who said she was a "Cobol programmer." She hadn't learned any other functional skills, such as design skills, languages or anything other than Cobol. It's not only that you shortchange yourself when you don't learn new functional skills or new domains; you also decrease your value to your current (and future) employer.

You might wonder why I've used 10 to 12 years as an introduction to midcareer. The most valuable people aren't afraid to change roles. I don't mean that people should change roles every year — that doesn't help them learn the functional skills or product in depth. But as an example, working as a developer, moving into a technical lead role, moving back to a development role, moving into a project management role, moving on to a different development role — all of those changes can make you more valuable and capable in any position you take.

Revisit functional skills when you change roles. If you change roles in an organization — such as moving from development to testing, from testing to project management or from management to architect — plan to update your functional skills for your new role.

If you've been a technical lead and you're moving to an architecture position, you'll want to learn or reinforce new techniques to allow you to develop ideas and design more effectively alone and with others.

When I realized I was interested in learning more than just technical functional skills, I started working on my project management and people management functional skills so that I could be successful in those areas. It doesn't matter which functional skills you start to improve once you've been working for a while; it only matters that you decide you're ready to expand your skills in another dimension.

Remember the nontechnical skills. No matter where you are in your career, remember to pay attention to skills like writing, presentation, negotiation and influence skills, to name just a few. They are helpful no matter where you are in your career.

Don't wait for your manager to plan your career. Wherever you are in your work experience, take some time to sketch out your future. The more you learn, the less of a commodity you are to your employer — and the more valuable you are. **53133**

CAREER ADVICE

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Advertising Supplement

IT Careers: Diversity Profiles Provide Advice

Patt Romero Cronin, vice president of IBM's global services business transformation, and Wendy Roberts, founder and CEO of Future Skies Inc., represent big business and entrepreneurs. Both women say learning lessons, beyond technology, is the secret to success.

Cronin says her lessons began with parents who stressed lifelong learning. "Next are the multiple managers through my career at IBM … the one who took a risk and gave me my first management opportunity when I was eight months pregnant, the site general manager that invested in me as his technical assistant. They taught me to think broadly as well as strategically. My third influence has been women, inside and outside of IBM, who have demonstrated balance between work and family."

Both women are forces in the IT world. Cronin, listed as one of the 50 most influential Hispanics in engineering and technology, is a 20-year IBM veteran. She's responsible for a budget of $1.8 billion to provide the solutions behind IBM's global services business. She's been at the lead of critical technology projects, heading a team of 12,000 consultants who helped clients plan, design and implement e-business solutions and heading technology integration for the 2000 Summer Olympic Games. Her team created software to track Olympic entrants, measure performance, and post results.

Roberts' company, Future Skies, is a software contractor for the Department of Defense. She was one of three people who had been architecting the Army's baseline systems while at other companies. When she launched Future Skies, that expertise landed her the first contract. In the past three years, her company has developed eight core applications for the Army, including time synchronization, automated position reports, battlefield messaging to identify friendly and enemy units, minefields, bridges, forward lines, and the software supporting the military's digital address book.

Important Lessons, Advice

For Cronin, the top three things to remember are to believe in yourself and not be afraid to take tough assignments and risk; to ask for help; and to think outside the box to deliver more than what's expected. She also believes she has responsibilities for the profession: to be a visible leader in the Hispanic community, to foster an "it can be done" attitude among Hispanics. "Hispanics run 13 of the largest corporations in the country. We own over 1.4 million businesses," she says. She is quick to point out the benefit of being raised by a Guatemalan mother and El Salvadorian father in a household where Spanish was spoken and family-first priorities instilled. "In the business world, this has become a tremendous asset, especially in large multinational companies where it takes many people and groups to achieve business goals."

Roberts focuses on leadership, too. "I learned that employees really are valued assets," she says. "You have to make sure you reward them for their hard work." While there are personal payoffs, Roberts believes the resulting environment wins customers, too. She also has learned that as a small business owner and a woman, "I've had to build the business by being completely on top of things. You can't just be smart; you have to be smarter and quicker on your feet. That approach has earned me a reputation as someone my customers want to work with."

As with Cronin, Roberts believes personal growth is an ongoing necessity. "Many IT folks think the most important thing they can do is know the latest technologies, read every book and be ahead of things. It took me a long time to realize that it's not just what you know, but also how you interact with people around you, how you manage your life, identifying where there are holes and how you fill them. We are here to grow."

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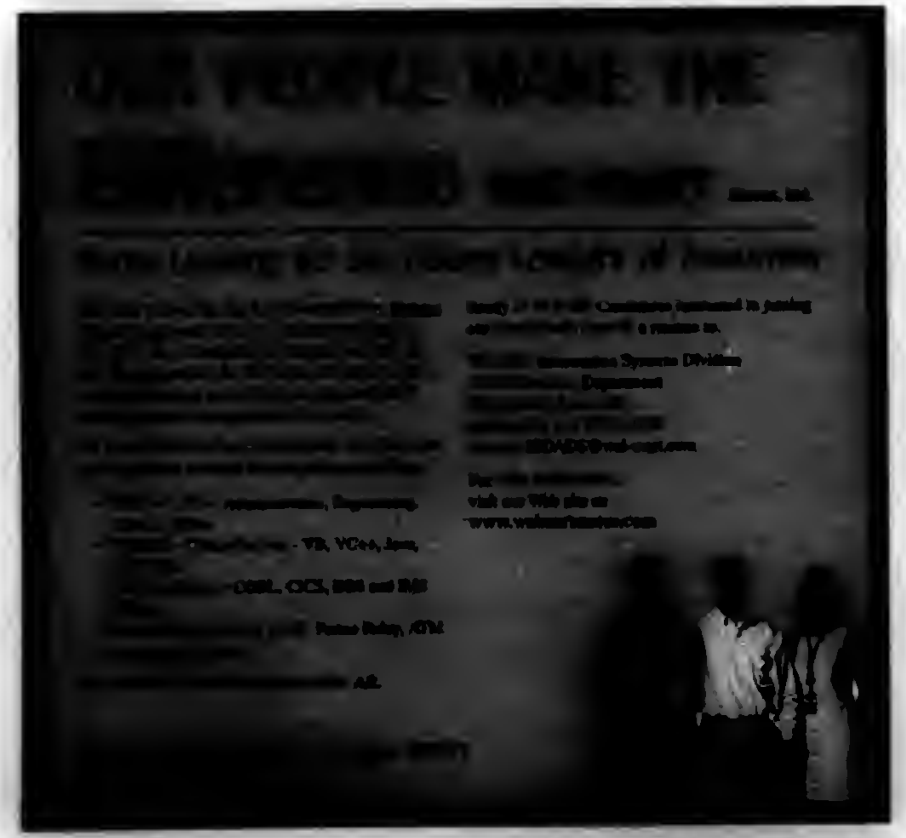

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Page number refers to page on which story begins. Company names can also be searched at www.computerworld.com.

A.A. Edwards & Sons Inc. 39
ABN AMRO Bank NV 10
Accenture Ltd. 44
Accuri Inc. 10
Adept Business Services 44
Advanced Micro Devices Inc. 8,10
American Express Co. 8
Anonymous Holding Corp. 39
Ann Taylor Inc. 7
Apax Management Group Inc. 10
Apple Computer Inc. 8,45
Arby's 39
Atlantic Automotive Inc. 39
Automotive Technologies Inc. 24
Avid Inc. 10
Avis Inc. 39
Bayview College 39
Bay Wheels Inc. 39
Bayview College 41
BF Group PLC 39
Bluffview Group 1,39
Business Objects SA 10,40
Cadence Inc. 10
Campbell Wolf Co. 39
Carnegie Foot Corp. 10
Cisco Systems Inc. 8,10
Computer Associates International Inc. 2,40
Computer Technology Industry Association 39
Counterpane Internet Security Inc. 10
Credit Information Bureau (M'sia) Ltd. 10
Cullinet Software Inc. 39
Cummins Inc. 39
Dassault Systèmes SA 1
Dexter Corporation 40,45
Dartmouth College 7
Delphi Inc. 39
Defense Information Systems Agency 1
Dell Inc. 8,34
Des Moines Public Schools 11
Deutsche Financial Services Inc. 8
Dow Chemical Co. 40
Dun & Bradstreet Corp. 40
Dunkin' Inc. 39
Eplus LLC 11
Electric Systems & Software Inc. 1
Electric Power Research Institute Inc. 39
Electronic Data Systems Corp. 10,25,40
EMC Corp. 10
Environmental Systems Research Institute Inc. 1
Epsilon Inc. 9
Enterprise Applications Consulting 39
Enterprise Strategy Group Inc. 8
Equilibrium Inc. 7
Expert Choice Inc. 10
Fenwick & West LLP 8
Financial Services Technology Consortium 10
Fleetwood Inc. 39
Ford Motor Co. 39
Forrester Research Inc. 10,40
Gartner Inc. 6,7,8,10,38,40
General Motors Corp. 8,24
Georgia-Pacific Corp. 39
Harvard University 39
Health Information and Management Systems Society 39
Hewlett-Packard Co. 8,9,34
Hitachi Data Systems Corp. 10
Holland & Knight LLP 10
HSBC Holdings PLC 8
Huawei Technologies Co. 10
Huntington Bancshares Inc. 40
Hyperion Solutions Corp. 39
Hyundai Corp. 39
IBM 1,6,7,8,9,34,38,39,40
Illuminata Inc. 7
Kansas Research Inc. 44
Impact Group 1
Infosys Technologies Ltd. 10
Intel Corp. 8,10
Interchange Academy 39
Joshua Joseph Inc. 10,34
Iriane Inc. 40
Lexington Group 10
Massachusetts Software Council 39
Mastercard International Inc. 8
Matrix Group 10
Mid Inc. 10
Mullen Financial Corp. 40
Microsoft Corp. 8,9,10,25,38,40
MIT 10
Motorola Inc. 8
Novartis SA Group 10
National Association of Software and Service Companies 39
Nationwide Inc. 9
Network Appliance Inc. 10,40
New Horizons Computer Learning Centers Inc. 40
New York University 39
Nortel Networks Corp. 40
Northrop Grumman Corp. 10
Novell Inc. 14
Ohio State University 39
Oppen Inc. 39
Oracle Corp. 39
Oregon State University 39
Oregon University System 39
Page Inc. 39
Pacific Cycle LLC 7
Partners Healthcare System Inc. 39
Peoplesoft Inc. 39
Planners Press Corp. 8
Plantree Software Inc. 10
Polo Ralph Lauren Corp. 8
Precision Castparts Corp. 39
Project Management Institute 39
Quaker Valley Foods Inc. 40
Quanta Computer Inc. 14
Red Hat Inc. 7
Reed Smith LLP 10
Reuters Group PLC 8
Rosenblatt Law LLC 39
Rosett Help Technology 39
Rural Life's Health Systems Inc. 40
Salesforce.com Inc. 1,39
SAP AG 1,40,39
SAS Institute Inc. 10
SAS Users Group International 10
Sentry Associates Inc. 39
Semantic Technology LLC 39
Seattle Central Community College 39
Seaway Networks Inc. 8
Sequoia Sierra Inc. 1,40,40
Sierra Atlantic Inc. 10
Silicon Graphics Inc. 10,39
Smith College 39
Sun Microsystems Inc. 10
Society for Information Management 39
Sonic Foundry Inc. 8
Source Medical Solutions Inc. 39
Spherion Inc. 8
Spherion Inc. 8
Standish Group Inc. 39
Storage Networking Industry Association 10
Stromsburg Inc. 10
Sun Microsystems Inc. 6,7,8,10
Sybase Inc. 7
Talent-Reg.com 39
Target Corp. 7
Tata Consultancy Services Ltd. 44
The Burlington Northern and Santa Fe Railway Co. 1
The Hershey Financial Group 8
The Lawson's Group Inc. 34
The Prudential Insurance Company of America 34
The Yankee Group 10
Tibco Software LLC 40
Total Pacific Shipyards Corp. 40
Toppan Communications Inc. 8
Toyota Motor Corp. 39
Trauma Medical Centers Inc. 40,45
Tufts Associated Health Plans Inc. 44
Tyson Foods Inc. 7
U.S. Air Force 1
U.S. Army 1,39
U.S. Department of Defense 1
U.S. Department of Health and Human Services 10
U.S. Department of the Navy 1
University Avionics Systems 39
University of Bristol 10
University of California, Berkeley 39
Vega Consulting Solutions Inc. 39
Veritas Software Corp. 1
Verizon Communications Inc. 39
Visa U.S.A. Inc. 8
Vmic, Adept Systems Inc. 7
Wales & Partners Ltd. 34
Wellington Inc. 1
Wellmark Blue Cross and Blue Shield of Iowa 10
Wendy's 39
Wilmington, Delaware 10
Wipro Ltd. 10
Wipro Ltd. 10
Zappos.com Inc. 1

Continued from page 1

Siebel

expected, but the Tampa, Fla.-based maker of food-handling equipment for supermarkets has had virtually no interaction with Siebel over the past 18 months, Hahmann said.

"Everyone that I knew seems to have left the company," he said. "Not one person has contacted me except for the annual [maintenance contract] renewal. Pretty sad."

Lawrie was hired last May to replace company founder Thomas Siebel as CEO because of his credentials as an IBM executive, said Ian Jacobs, an analyst at Current Analysis Inc. in Sterling, Va. Siebel's board felt that Lawrie's IBM pedigree would show users and investors "that stability was the word," Jacobs noted.

But Siebel is still losing ground in the CRM market, he said, adding that the company's sales problems are partly the result of increasingly strong competition from rivals such as Salesforce.com Inc. and SAP AG. Jacobs also cited Siebel's continuing lack of success in marketing its software to small and midsize users.

Debra Domeyer, chief technology officer at CarsDirect.com Inc., an online automobile retailer that uses Siebel's call center and sales applications, praised the direction that the vendor had taken under Lawrie as part of his "Chapter 2" strategy.

"Siebel has been on the right track with their increased customer focus over the last year, and we hope they continue that emphasis," Domeyer said.

But Lawrie was probably living "on borrowed time," despite the fact that he had yet to reach his one-year anniversary at Siebel, said Richard Napier, business development manager at InFact Group. The Plano, Texas-based consulting firm and systems integrator uses Siebel's CRM On-Demand hosted applications internally and does Siebel-related work for its customers.

Lawrie's "approach to business growth was one that I respected, and I'm disappointed that it didn't come to fruition," Napier said. He added that he took the appointment of Shaheen, a longtime member of Siebel's board, as a sign that the company's directors don't view its plight as a situation that requires a complete turnaround.

Market Forces

But Siebel hit a big pothole in the first quarter. Two weeks ago, the company warned that its revenue would total about $300 million, well below Wall Street forecasts of $337.5 million. Software license fees are expected to come in at about $75 million, down more than 40% from $126.8 million in last year's first quarter.

An IT manager at a financial firm that runs Siebel's software said the vendor's ongoing problems are indicative of a realignment in the CRM market. "With SAP and Salesforce.com eating away at Siebel's market share, the next CEO is going to have to have some dynamic new ideas on how to revive the business," said the IT manager, who asked not to be named.

He added that he will be watching to see whether the first-quarter revenue shortfall affects Siebel's technical support and software-release schedule. **53797**

Upheaval at Siebel

- **MAY:** IBM executive J. Michael Lawrie is named to replace company founder Thomas Siebel as CEO.
- **JULY:** The CRM vendor reports a 10% drop in revenue year over year for Q2.
- **OCTOBER:** Lawrie details "Chapter 2" strategy for revitalizing Siebel; company tops Q3 earnings forecast.
- **DECEMBER:** Siebel announces a strategy for increasing sales to small and midsize users.
- **JANUARY:** Siebel acquires Edocs Inc., reports a 7% increase in Q4 revenue.
- **APRIL:** The company warns of a Q1 revenue shortfall, replaces Lawrie with board member George Shaheen.

2004 2005

Shaheen Mostly Mum on Plans

DURING A CONFERENCE call last week, new Siebel CEO George Shaheen said that one of his priorities will be helping the company's installed base of users make the most of their CRM investments. But he offered few specifics about his plans, saying he first needs to evaluate Siebel's operations.

Shaheen, who has been a member of Siebel's board since 1995, said he will keep the current management team in place, at least for now. He added that Siebel will continue to develop its CRM analytics technology and try to broaden the use of its hosted applications. He expects to disclose more details of his strategy on April 27, when Siebel is scheduled to report its first-quarter results.

> **"This is all about performance."**
>
> THOMAS SIEBEL, CHAIRMAN, SIEBEL SYSTEMS

Both Shaheen and Thomas Siebel, the company's chairman, sought to assuage users' fears about continued instability by promising that the appointment of Shaheen wasn't just an interim step for Siebel. In addition, Shaheen said that Siebel's executives "are not running this company for short-term results."

And Thomas Siebel said the departure of Lawrie wasn't prompted by any disagreements on strategy. "This is all about performance. That's the only issue," he said, adding that the company's earnings over the past few quarters hadn't met internal expectations.

One Siebel user said she wasn't comforted by such comments because Shaheen didn't appear to know much about the vendor. "I have questions about the leadership stability at the company. There seems to be turmoil every year," said the user, who works at a provider of call center services and asked not to be identified.

But Joshua Greenbaum, an analyst at Enterprise Applications Consulting in Berkeley, Calif., said it's understandable that Shaheen was reticent about divulging specific plans. "There's a miracle that needs to happen here, and it's hard for Shaheen on Day One to say what that is," Greenbaum said.

From 1989 to 1999, Shaheen was CEO of Andersen Consulting, which is now Accenture Ltd. He left the firm to run Webvan Group Inc., an online grocery venture that went belly-up during the dot-com bust.

Mark Johnston, president of Denver-based Tier1 Innovation LLC, a software services company that focuses on Siebel deployments, worked at Andersen Consulting during Shaheen's tenure there.

Shaheen "has more experience than anybody I can think of in terms of executing on a plan," Johnston said. "Lawrie may have set the tone for what Siebel Chapter 2 is going to look like, but in the last nine months, I really hadn't seen anything in the way of execution."

However, Siebel is caught in a tenuous market position, said Forrester Research Inc. analyst Erin Kinikin. "Enterprise applications are about either being big or being innovative," she said. "And right now, Siebel isn't big enough and they're really not innovative enough."

– Marc L. Songini, with Stacy Cowley of the IDG News Service

FRANKLY SPEAKING

Siebel's problems make the case that CRM as we know it doesn't work and needs to be reinvented, says Frank Hayes. **Page 50**

Corrections

A STORY in last week's News section about Computer Associates International Inc. ("Internal Changes, Acquisition Seen as Steps Forward") incorrectly identified the business unit that is responsible for mainframe database management tools. Those products are part of CA's enterprise systems management unit.

AN ANSWER to a News story last week ("Stanley Managing Business, IT Offices"). Tom Mahoney's employer and title were incorrectly listed. Mahoney is a vice president at Mellon Global Cash Management, a division of Pittsburgh-based Mellon Financial Corp. The story also misidentified the leader of Huntington Bancshares Inc.'s initiative to combine IT and business personnel in a single office to work on projects together. Mike Dolbeff, the bank's executive vice president of operations and technology, led the effort.

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ABN AMRO BANK NV 10
ACCENTURE LTD. 49
ACER INC. 10
ADEPT CUSTOMER SERVICES 44
ADVANCED MICRO DEVICES INC. 8,10
AMERICAN EXPRESS CO. 11
AMERITRADE HOLDING CORP. 49
AMR RESEARCH INC. 7
APEX MANAGEMENT GROUP INC. 10
APPLE COMPUTER INC. 8,10
AT&T CORP. 34
ATLANTIC ASSOCIATES INC. 38
AVENTIS PHARMACEUTICALS INC. 49
AXIS-ONE INC. 10
BAA SYSTEMS PLC 49
BENTLEY COLLEGE 49
BIND NETWORKS INC. 6
BIZ-WARE INC. 49
BOEING'S DEPARTMENT STORE LLC. 7
BOSTON COLLEGE 10
BP GROUP PLC 31
BURTON GROUP 1,28
BUSINESS OBJECTS SA 10
CD CONSULTING 42,43
CAMPBELL SOUP CO. 49
CANADA POST CORP. 10
CAREER-MARC INC. 28,28
CAREERBOT.COM INC. 7
CHALLENGER, GREY & CHRISTMAS INC. 49
CHARTER COMMUNICATIONS INC. 49
CHECKPOINT INC. 10
CISCO SYSTEMS INC. 6
CITIBANK 10
COGNEX INC. 10
COLLEGERECRUITER.COM 28,28
COLUMBIA HCA 49
COMPUTER ASSOCIATES INTERNATIONAL INC. 7,49
COMPUTING TECHNOLOGY INDUSTRY ASSOCIATION 28
COUNTERPANE INTERNET SECURITY INC. 10
CREDIT INFORMATION BUREAU OF INDIA LTD. 10
CULLINET SOFTWARE INC. 49
CUMMINS INC. 49
CURRENT ANALYSIS INC. 1
CUTTER CONSORTIUM 42,49
DARTMOUTH COLLEGE 7
DECRA INC. 11
DEFENSE INFORMATION SYSTEMS AGENCY 1
DELL INC. 8,10
DES MOINES PUBLIC SCHOOLS 11
DISCOVER FINANCIAL SERVICES INC. 8
DATON VANCE CORP. 40
EBAY INC. 6
EPLUS LLC 11
ELECTRON SYSTEMS & SOFTWARE INC. 1
ELECTRIC POWER RESEARCH INSTITUTE INC. 40
ELECTRONIC DATA SYSTEMS CORP. 10,21,41
EMC CORP. 11
EMI INDUSTRIES INC. 1
EMPIRIX INC. 6
ENTERPRISE APPLICATIONS CONSULTING 40
ENTERPRISE STRATEGY GROUP INC. 11
EPICGLOBAL INC. 7
EXPERT CHOICE INC. 10
FENWICK & WEST LLP 6
FINANCIAL SERVICES CO. 49
FINANCIAL SERVICES TECHNOLOGY CONSORTIUM 10
FINDEXOUND INC. 10
FORD MOTOR CO. 24
FORRESTER RESEARCH INC. 10,49
GARTNER INC. 6,7,8,10,28,40
GENERAL MOTORS CORP. 8,24
GEORGIA-PACIFIC CORP. 40
HARVARD UNIVERSITY 40
HEALTH INFORMATION AND MANAGEMENT SYSTEMS SOCIETY 49
HEWLETT-PACKARD CO. 7,8,11,14
HITACHI DATA SYSTEMS CORP 6
HOLLAND & KNIGHT LLP 10
HSBC HOLDINGS PLC 6
HUAWEI TECHNOLOGIES CO. 10
HUNTINGTON BANCSHARES INC. 49
HYPERION SOLUTIONS CORP. 28
HYUNDAI CORP 28
IBM 1,6,7,8,11,14,28,38,49
ILLUMINATA INC. 7
ILOGOS RESEARCH INC. 49
IMPACT GROUP 1
INFOSYS TECHNOLOGIES LTD. 14
INTEL CORP 6,10
IT LEADERSHIP ACADEMY 24
JOHNSON & JOHNSON 28,34
KEANE INC. 10
LEXMEDIS GROUP 10
MASSACHUSETTS SOFTWARE COUNCIL 49
MASTERCARD INTERNATIONAL INC. 6
MAXDATA CORP. 11
MCI INC. 7,11
MELLON FINANCIAL CORP. 49
MICROSOFT CORP 4,8,10,11,14,15,28,40
MIT 14
MOTOROLA INC. 8
NEWNES EPL GROUP 10
NATIONAL ASSOCIATION OF SOFTWARE AND SERVICE COMPANIES 10
NEOPHARM INC. 10
NETWORK APPLIANCE INC. 7,38
NEW HORIZONS COMPUTER LEARNING CENTER INC. 49
NEW YORK UNIVERSITY 40
NEXTEL COMMUNICATIONS INC. 40
NORTHPOINT TECHNOLOGY ENTERPRISE NETWORKS 28
NOVELL INC. 14
OHIO STATE UNIVERSITY 49
OPTEIR INC. 10
ORACLE CORP. 40
OREGON STATE UNIVERSITY 28
OREGON UNIVERSITY SYSTEM 49
PAGE INC. 49
PACIFIC CYCLE LLC. 7
PARTNERS HEALTHCARE SYSTEM INC. 39
PEOPLESOFT INC. 40
PLUMB'S PRIDE CORP. 6
PLUMTREE SOFTWARE INC. 10
POLO RALPH LAUREN CORP. 8
PRECISION CASTPARTS CORP. 43
PROJECT MANAGEMENT INSTITUTE. 40
QUAKER VALLEY FOODS INC. 40
QUANTA COMPUTER INC. 14
RED HAT INC. 7
REED SMITH LLP 10
REUTERS GROUP PLC. 6
RESUMIX.COM LLC. 28
ROBERT HALF TECHNOLOGY 44
SAINT LUKE'S HEALTH SYSTEM INC. 42
SALESFORCE.COM INC. 1,10
SAP AG 1,40,28
SAS INSTITUTE INC. 10
SAS USERS GROUP INTERNATIONAL 10
SCITES ASSOCIATES INC. 49
SEAGATE TECHNOLOGY LLC. 49
SEATTLE CENTRAL COMMUNITY COLLEGE 49
SEAWAY NETWORKS INC. 6
SECURIA 10
SIEBEL SYSTEMS INC. 1,49,50
SIERRA ATLANTIC INC. 10
SILICON GRAPHICS INC. 11,28
SMITH COLLEGE 49
SOA SOFTWARE INC. 49
SOCIETY FOR INFORMATION MANAGEMENT 49
SONIC FOUNDRY INC. 6
SOURCE MEDICAL SOLUTIONS INC. 28
SOURCEFIRE INC. 6
SPIRESOURCE INC. 6
STANLEY ASSOCIATES INC. 49
STATE STREET CORP. 6
STORAGE NETWORKING INDUSTRY ASSOCIATION 6
STRONGAUTH INC. 6
SUN MICROSYSTEMS INC. 6,7,8,11
SYSTINET CORP. 1
TALENTHIRE.COM 40
TARGET CORP. 7
TATA CONSULTANCY SERVICES LTD. 14
THE BURLINGTON NORTHERN AND SANTA FE RAILWAY CO. 1
THE HEINEKEN FINANCIAL GROUP 6
THE LEADER'S EDGE INC. 34
THE PRUDENTIAL INSURANCE COMPANY OF AMERICA 49
THE YANKEE GROUP 10
TIER1 INNOVATION LLC 49
TODD PACIFIC SHIPYARDS CORP. 43
TOPSPIN COMMUNICATIONS INC. 6
TOYOTA MOTOR CORP. 24
TRUMAN MEDICAL CENTERS INC. 42,43
TUFTS ASSOCIATED HEALTH PLANS INC. 41
TYSON FOODS INC. 7
U.S. AIR FORCE 1
U.S. ARMY 1,28
U.S. DEPARTMENT OF DEFENSE 1
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES 10
U.S. DEPARTMENT OF THE NAVY 1
UNIVERSITY AND CAREER DECISIONS 28
UNIVERSITY OF BRISTOL 28
UNIVERSITY OF CALIFORNIA, BERKELEY 49
VEDA CONSULTING SOLUTIONS INC. 49
VERITAS SOFTWARE CORP. 11
VERIZON COMMUNICATIONS INC. 28
VISA U.S.A. INC. 6
WAL-MART STORES INC. 7
WALK II ASSOCIATES 24
WEBLAYERS INC. 1
WELLMARK BLUE CROSS AND BLUE SHIELD OF IOWA 10
WINDOR KNOORF INTERNATIONAL GMBH 14
WIPFLI LLP 49
WIPRO LTD. 14
ZAPTHINK LLC. 1

ADVERTISER'S INDEX

Continued from page 1

Siebel

expected, but the Tampa, Fla.-based maker of food-handling equipment for supermarkets has had virtually no interaction with Siebel over the past 18 months, Hahmann said.

"Everyone that I knew seems to have left the company," he said. "Not one person has contacted me except for the annual [maintenance contract] renewal. Pretty sad."

Lawrie was hired last May to replace company founder Thomas Siebel as CEO because of his credentials as an IBM executive, said Ian Jacobs, an analyst at Current Analysis Inc. in Sterling, Va. Siebel's board felt that Lawrie's IBM pedigree would show users and investors "that stability was the word," Jacobs noted.

But Siebel is still losing ground in the CRM market, he said, adding that the company's sales problems are partly the result of increasingly strong competition from rivals such as Salesforce.com Inc. and SAP AG. Jacobs also cited Siebel's continuing lack of success in marketing its software to small and midsize users.

Debra Domeyer, chief technology officer at CarsDirect.com Inc., an online automobile retailer that uses Siebel's call center and sales applications, praised the direction that the vendor had taken under Lawrie as part of his "Chapter 2" strategy.

"Siebel has been on the right track with their increased customer focus over the last year, and we hope they continue that emphasis," Domeyer said.

But Lawrie was probably living "on borrowed time," despite the fact that he had yet to reach his one-year anniversary at Siebel, said Richard Napier, business development manager at InFact Group. The Plano, Texas-based consulting firm and systems integrator uses Siebel's CRM On-Demand hosted applications internally and does Siebel-related work for its customers.

Lawrie's "approach to business growth was one that I respected, and I'm disappointed that it didn't come to fruition," Napier said. He added that he took the appointment of Shaheen, a longtime member of Siebel's board, as a sign that the company's directors don't view its plight as a situation that requires a complete turnaround.

Market Forces

But Siebel hit a big pothole in the first quarter. Two weeks ago, the company warned that its revenue would total about $300 million, well below Wall Street forecasts of $337.5 million. Software license fees are expected to come in at about $75 million, down more than 40% from $126.8 million in last year's first quarter.

An IT manager at a financial firm that runs Siebel's software said the vendor's ongoing problems are indicative of a realignment in the CRM market. "With SAP and Salesforce.com eating away at Siebel's market share, the next CEO is going to have to have some dynamic new ideas on how to revive the business," said the IT manager, who asked not to be named.

He added that he will be watching to see whether the first-quarter revenue shortfall affects Siebel's technical support and software-release schedule. **53797**

Upheaval at Siebel

- **MAY:** IBM executive J. Michael Lawrie is named to replace company founder Thomas Siebel as CEO
- **OCTOBER:** Lawrie details "Chapter 2" strategy for revitalizing Siebel; company tops Q3 earnings forecast
- **JANUARY:** Siebel acquires Edocs Inc.; reports a 7% increase in Q4 revenue

2004

- **JULY:** The CRM vendor reports a 10% drop in revenue year over year for Q2
- **DECEMBER:** Siebel announces a strategy for increasing sales to small and midsize users
- **APRIL:** The company warns of a Q1 revenue shortfall, replaces Lawrie with board member George Shaheen

Shaheen Mostly Mum on Plans

DURING A CONFERENCE call last week, new Siebel CEO George Shaheen said that one of his priorities will be helping the company's installed base of users make the most of their CRM investments. But he offered few specifics about his plans, saying he first needs to evaluate Siebel's operations.

Shaheen, who has been a member of Siebel's board since 1995, said he will keep the current management team in place, at least for now. He added that Siebel will continue to develop its CRM analytics technology and try to broaden the use of its hosted applications. He expects to disclose more details of his strategy on April 27, when Siebel is scheduled to report its first-quarter results.

Both Shaheen and Thomas Siebel, the company's chairman, sought to assuage users' fears about continued instability by promising that the appointment of Shaheen wasn't just an interim step for Siebel. In addition, Shaheen said that Siebel's executives "are not running this company for short-term results."

> **"This is all about performance."**
>
> **THOMAS SIEBEL,** CHAIRMAN, SIEBEL SYSTEMS

And Thomas Siebel said the departure of Lawrie wasn't prompted by any disagreements on strategy. "This is all about performance. That's the only issue," he said, adding that the company's earnings over the past few quarters hadn't met internal expectations.

One Siebel user said she wasn't comforted by such comments because Shaheen didn't appear to know much about the vendor. "I have questions about the leadership stability at the company. There seems to be turmoil every year," said the user, who works at a provider of call center services and asked not to be identified.

But Joshua Greenbaum, an analyst at Enterprise Applications Consulting in Berkeley, Calif., said it's understandable that Shaheen was reticent about divulging specific plans. "There's a miracle that needs to happen here, and it's hard for Shaheen on Day One to say what that is," Greenbaum said.

From 1989 to 1999, Shaheen was CEO of Andersen Consulting, which is now Accenture Ltd. He left the firm to run Webvan Group Inc., an online grocery venture that went belly-up during the dot-com bust.

Mark Johnston, president of Denver-based Tier1 Innovation LLC, a software services company that focuses on Siebel deployments, worked at Andersen Consulting during Shaheen's tenure there.

Shaheen "has more experience than anybody I can think of in terms of executing on a plan," Johnston said. "Lawrie may have set the tone for what Siebel Chapter 2 is going to look like, but in the last nine months, I really hadn't seen anything in the way of execution."

However, Siebel is caught in a tenuous market position, said Forrester Research Inc. analyst Erin Kinikin. "Enterprise applications are about either being big or being innovative," she said. "And right now, Siebel isn't big enough and they're really not innovative enough."

– Marc L. Songini, with Stacy Cowley of the IDG News Service

FRANKLY SPEAKING

Siebel's problems make the case that CRM as we know it doesn't work and needs to be reinvented, says Frank Hayes. **Page 50**

Corrections

A STORY in last week's News section about Computer Associates International Inc. ("Internal Changes, Acquisition Seen as Steps Forward") incorrectly identified the business unit that is responsible for mainframe database management tools. Those products are part of CA's enterprise systems management unit.

ANOTHER News story last week ("Banks Merging Business, IT Offices"), Tom Melman's employer and title were incorrectly listed. Melman is a vice president at Mellon Global Cash Management, a division of Pittsburgh-based Mellon Financial Corp. The story also misidentified the leader of Huntington Bancshares Inc.'s initiative to combine IT and business personnel in a single office to work on projects together. Willie Dolloff, the bank's executive vice president of operations and technology, led the effort.

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FRANK HAYES ■ FRANKLY SPEAKING

Death of a Salesman

IS THIS THE END FOR CRM AS WE KNOW IT? Now that Siebel Systems is sinking — sales drifting down, big investors unhappy, no apparent turnaround strategy, CEO Michael Lawrie booted out the door after less than a year — is customer relationship management headed for a fall too?

At first glance, it doesn't look that way. It looks a lot like Siebel's troubles are, well, just Siebel's. Lots of other companies, both vendors and customers, are doing fine with CRM.

Aren't they?

After all, the idea behind CRM is solid — maybe even brilliant. Customers are where the money comes from. We all want to get as much money as we can from them and to keep our best customers as long as possible. That's what the best salespeople have always done.

So using technology to help salespeople stay close to customers, to cross-sell and track each customer's value, doesn't just make lots of sense. Implemented right, it should also make lots of dollars.

It certainly made plenty of money for Siebel after the company invented packaged CRM. Siebel was riding a CRM rocket in the late 1990s. Then competitors took notice. SAP, Oracle and PeopleSoft ate away at Siebel's application sales on the high end. Salesforce.com went on a tear through the market for Web-based CRM, which is focused on smaller customers. And since 2001, Siebel has lost 40% of its revenue and employees.

What was wrong? Why couldn't Siebel manage relationships with its own customers? A year ago, the theory was that Siebel's cutthroat sales culture was driving potential buyers to its competitors. That's when founder Tom Siebel was replaced as CEO by Lawrie, a longtime IBM sales exec who was supposed to cozy up to the customers.

It didn't work. Now Lawrie is out, replaced by former Andersen Consulting CEO George Shaheen. Does this mean Siebel will shift toward services — consulting and Web-based CRM? Or is Shaheen the unlikely choice to revitalize Siebel's flagship CRM software? Or is he a placeholder CEO who will spruce the company up for sale to SAP, IBM or Microsoft? Those are urgent questions for Siebel customers.

But they're missing the point.

Siebel was built, inside and out, on CRM. Siebel was all about automating CRM as a business process.

Trouble is, customer relationship management isn't primarily a business process that can be automated. Real management of customer relationships is a culture, a strategy, a way of doing business.

And too many organizations use CRM in a way that marketing guru Herschell Gordon Lewis has dubbed CEM — customer elimination management.

They don't use CRM software to help good salesmen do a great job. Instead, they feed customers into the CRM sausage machine, a mechanical data-grinder that combines a phony familiarity — strangers in a call center who know everything about the customer — with a relentless, robotized drive to sell, sell, sell.

It's the sales approach that drove Siebel's early success. It's the model built into Siebel's software, and every other CRM product. It couldn't last. It failed Siebel. And without a radical overhaul, it will fail every CRM vendor — and every CRM user, too. What customer wants to keep doing business with a mechanical salesman?

That's not what the salespeople we support need. They need what CRM software promised: technology that really does help them with customers by supporting a customer relationship culture, not just automating a process.

That's what Siebel needs too, in more ways than one. If Siebel is to survive, it will have to abandon old-school CRM and reinvent it as a better way for people to sell to people. Then Siebel will have to build that into both its products and its own way of selling them.

Because CRM-as-we-know-it *is* dead — and deadly. And it will take Siebel, and more than a few CRM customers, with it. 53788

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at frank_hayes@computerworld.com.

SHARK TANK

That's Just Wrong

Quality department employee has been on the job for several months when she calls IT because she can't log onto the central manufacturing system – she can't recall her user ID. "The user ID is the last name and first initial of the employee," says support pilot fish. So what could be wrong? "Investigation reveals that the quality manager originally gave IT an incorrect spelling of her name," fish sighs, "and she couldn't remember the valid incorrect spelling!"

Yes You, @#$%!

Sysadmin pilot fish gets a wireless-enabled handheld computer with lots of cool features. "I find out how to use a voice recording as the alert tone when I'm paged, and record a message that says, 'Wake up, @#$%!' when I'm paged by the servers," fish reports. "And promptly forget about it. Until I'm in a meeting. And get paged." Red-faced fish can only mumble, "My server is paging me" – and beat a hasty retreat.

Dang Dongle!

This expensive engineering software suite isn't used often, so pilot fish orders three concurrent-user licenses. They arrive with a license file and a single USB dongle. How do I use that for three users? fish asks vendor support. "You install that license on each user's computer," support guy says, "and they can pass the dongle around when they want to use the application. Whoever has the dongle can open up three instances of the program on their PC – though I'm not sure why anyone would want to do that."

But It Was Right Here

Pilot fish spends a day training a user on a newly installed program. But the next day, user calls to say she can't find it. "After some phone troubleshooting, I discovered there appeared to be no remnants of it anywhere on her PC," says fish. He drives to the site 20 minutes away and spots the problem when he walks in: User is working at a PC on the other side of the office. Sighs fish, "Much to my chagrin, I did not think to ask, 'Are you using the PC we trained on yesterday?' "

That's Why

User calls help desk: "The person across the hall got some new software, and I think I should have it, too." What software is it? asks pilot fish. User: "I don't know the name of it." Fish: Well, what does it do? User: "I don't know." Fish: What do you use it for? User: "I'm not sure." Fish: What's its purpose? Why exactly do you need it? User: "I don't know its purpose – but I need it because she has it."

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FRANK HAYES ▪ FRANKLY SPEAKING

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